

### **ANALYTICAL REPORT**

Job Number: 280-106036-1

Job Description: FAY-2018 Residential Sampling

For:

Chemours Company FC, LLC The c/o AECOM
Sabre Building, Suite 300
4051 Ogletown Road
Newark, DE 19713

Attention: Michael Aucoin

Approved for release Michelle A Johnston Project Manager II 4/2/2018 11:58 AM

Michelle A Johnston, Project Manager II 4955 Yarrow Street, Arvada, CO, 80002 (303)736-0110 michelle.johnston@testamericainc.com 04/02/2018

Michelle A. Johns

Revision: 2

cc: Barbara McGraw Kelly Rinehimer

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

#### TestAmerica Laboratories, Inc.

TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 <a href="https://www.testamericainc.com">www.testamericainc.com</a>

# **Table of Contents**

Co	over Title Page	1
Da	ata Summaries	4
	Definitions	4
	Case Narrative	5
	Detection Summary	8
	Client Sample Results	57
	Default Detection Limits	100
	Surrogate Summary	101
	QC Sample Results	103
	QC Association	110
	Chronicle	114
	Certification Summary	127
	Method Summary	128
	Sample Summary	129
	Manual Integration Summary	130
	Reagent Traceability	136
	COAs	142
Or	ganic Sample Data	173
	LCMS	173
	8321A_HFPO_Du	173
	8321A_HFPO_Du QC Summary	174
	8321A_HFPO_Du Sample Data	206
	Standards Data	382
	8321A_HFPO_Du ICAL Data	382
	8321A_HFPO_Du CCAL Data	429
	Raw QC Data	492

# **Table of Contents**

8321A_HFPO_Du Tune Data	492
8321A_HFPO_Du Blank Data	512
8321A_HFPO_Du LCS/LCSD Data	536
8321A_HFPO_Du MS/MSD Data	614
8321A_HFPO_Du Duplicate/Triplicate Data	626
8321A_HFPO_Du Run Logs	638
8321A_HFPO_Du Prep Data	646
Shipping and Receiving Documents	702
Client Chain of Custody	703
Sample Receipt Checklist	711

## **Definitions/Glossary**

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

Toxicity Equivalent Quotient (Dioxin)

TestAmerica Job ID: 280-106036-1

### Glossary

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

#### **CASE NARRATIVE**

Client: The Chemours Company FC, LLC Project: FAY-2018 Residential Sampling Report Number: 280-106036-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

For samples requiring analysis at a dilution, the dilution factor has been multiplied by the Method Detection Limit (MDL) for each analyte and evaluated versus the project-specific reporting limit (PSRL). If the obtained value is below the PSRL, then the PSRL is preserved as the reporting limit for the diluted result, otherwise, the obtained value becomes the reporting limit. This is done in order to maintain the PSRL to meet project requirements at the request of the client and to report the lowest possible RL for each analyte.

#### Revision - 4/2/2018

The certificates for laboratory samples 280-106036-3 through 280-106036-18 were revised to list the correct MS/REP information.

#### Revision - 3/29/2018

The report was revised to change several sample IDs in accordance with the revised chains of custodies. The following samples were revised:

FAY-D-7646TABOR-W1-02018 (280-106036-12) changed to FAY-D-7646TABOR-W1-1-020118

FAY-D-4059SPNSH-W1-1-020118 (280-106036-23) changed to FAY-D-4057SPNSH-W1-1-020118

FAY-D-6916CHKFT-W1-1-020118 (280-106036-27) changed to FAY-D-6416CHKFT-W1-1-020118

FAY-D-4059SPNSH-W1-2-020118 (280-106036-40) changed to FAY-D-4057SPNSH-W1-2-020118

#### Receipt

The samples were received on 2/2/2018 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.5° C, 0.6° C, 0.8° C, 0.9° C and 1.6° C.

#### **Receipt Exceptions**

The requested analyses were logged on a 15 business day turn around time due to current laboratory capacity.

The sample collection time of the REP laboratory QC volume associated with parent sample FAY-D-6476TABOR-W1-1-020118 (280-106036-2) listed on the chain of custody does not match the collection time of the parent sample. The laboratory logged the collection time of the REP laboratory QC volume equivalent to the parent sample per standard laboratory practice. The client was notified on 2/5/2018.

There was no sample collection date listed on the chain of custody for the REP laboratory QC sample volume received associated with parent sample FAY-D-5049MATTH-W1-1-020118 (280-106036-11). The laboratory logged the sample collection date of the REP laboratory QC sample volume per the container labels and equivalent to the parent sample per standard laboratory practice. The client was notified on 2/5/2018.

There was no sample collection date listed on the chain of custody for sample FAY-D-7646TABOR-W1-02018 (280-106036-12). The laboratory logged the sample collection date per the information on the container labels of this sample. The client was notified on 2/5/2018.

The following samples were received but not listed on the chain of custody: FAY-D-5049MATTH-W1-1-020118-D (280-106036-31), FAY-D-7609TABOR-W1-1-020118 (280-106036-32), FAY-D-7741TABOR-W1-1-020118 (280-106036-33) and FAY-D-FB-020118-B (280-106036-34). The laboratory logged the samples for HFPO-DA analysis per the information on the container labels of each respective sample. The client was notified on 2/5/2018.

The sample collection time listed on the container labels of FAY-D-47MAUDI-W1-2-020118 (280-106036-36) does not match the information on the chain of custody. The container labels list a collection time of 0905 while the chain of custody lists a collection time of 0900. The laboratory logged the sample collection time per the chain of custody. The client was notified on 2/5/2018. Per client instructions received on 2/7/2018, the sample collection time was revised to 0905.

The sample collection time on the container labels of FAY-D-1123NC20H-W1-1-020118 (280-106036-37) does not match the information on the chain of custody. The container labels list a collection time of 0946 while the chain of custody lists a collection time of 0943. The laboratory logged the sample collection time per the chain of custody. The client was notified on 2/5/2018.

A revised chain of custody capturing all missing sample IDs and/or collection date/times was submitted to the laboratory by the client via email on 2/9/2018. The revised and original chain of custody are included in the final report.

No other anomalies were observed during sample receipt.

#### **Standards**

Analytical standards were prepared using the acid form of the compound Perfluoro(2-propoxypropanoic) acid (HFPO-DA).

The surrogate compound, 13C3 HFPO-DA was introduced at the extraction step and was used as an internal standard for quantitation of HFPO-DA. The concentration of the surrogate spike is 0.2ug/L in water samples or 50ug/kg in soil samples.

#### Sample Extraction and Analysis

The samples presented in this report were extracted for the target analyte by TestAmerica Denver's SOP DV-OP-0019, Rev. 8 and analyzed for the target analyte by TestAmerica Denver's SOP DV-LC-0012, Rev. 14, with the exceptions of the items indicated in the DuPont QAS. Samples FAY-D-6476TABOR-W1-1-020118 (280-106036-2), FAY-D-5049MATTH-W1-1-020118 (280-106036-11) and FAY-D-3322DANDE-W1-1-020118 (280-106036-38) were chosen to be analyzed as duplicates and also to be spiked with the target analyte.

For water samples a 250mL aliquot of each sample is extracted using solid phase extraction technique with methanol conditioned Weak Anion Exchange cartridges. Each sample is spiked with the internal standard/surrogate, prior to extraction. After the sample is passed through the cartridge, the analytes are eluted with 2%Formic Acid, 6mLs of HPLC grade MeOH and then with 4mL of 10% ammonium hydroxide in methanol. The final volume is brought to 5mL using reagent water and the extract is analyzed by LC/MS/MS.

The target analyte is separated from other components on a high-performance liquid chromatography (HPLC) C18 column with a mobile phase mixture of water containing 0.1% ammonium acetate and methanol. The mass spectrometer detector is operated in the electrospray (ESI) negative ion mode. The instrument is calibrated at 7 concentration levels (0.2, 0.5, 1.0, 2.0, 5.0, 10 and 20ug/L). The target analyte is detected as the perfluoro(2-propoxypropanoic) acid with the parent ion of 328.8 amu. The daughter ions used for analysis by LC/MS/MS are at 284.8 amu. The ratio of the peak areas to the two ions must be  $\pm 20\%$  of the ion ratios in the mid-point ICAL for qualitative identification. Sample results are quantitated using the internal standard dilution.

#### **Tuning and Calibration**

The instrument is tuned with a solution of the target analyte such that mass assignments are within  $\pm 0.5$  amu of the daughter ions. The instrument is calibrated with seven concentration levels from 0.2ug/L to 20ug/L. Linear regression (y=ax+b) or quadratic functions (y=ax+cx2+b) are used with a correlation coefficient or coefficient of determination  $\ge 0.990$ .

Following initial calibration (ICAL), an initial calibration blank (ICB) is tested, which consists of methanol spiked with the surrogate. The result for the target analyte must be less than one half the reporting limit (RL) to proceed.

Next an initial calibration verification (ICV) standard is tested. This is a mid-level concentration standard from a different vendor from the ICAL standard. If a different vendor is not available then, a different lot number from the same vendor is used. The ICV must be within 80-120% of the true value.

The quantitation limit verification standard is a standard from the same source as the ICAL tested run at the RL level to determine accuracy near the detection limit. This recovery must be within 70-130%.

Continuing calibration verification (CCV) standards are tested every 10 injections and are from the same source as the ICAL and are at mid-level concentration. The recovery of the CCVs must be 70-130% or recalibration is necessary.

#### Method QC Samples

The Method Blank is processed reagent water spiked with internal standard and prepared with each batch of 20 samples of the same matrix. All samples in the batch are processed at the same time and with the same reagents. The method blank must be less than the LOD or associated batch samples must be re-extracted and reanalyzed.

Each batch is prepared with a low- and a mid-level concentration spike Laboratory Control Samples (LCS). The recoveries of these samples must be within 70-130% or associated batch samples must be re-extracted and reanalyzed. If the recovery is biased high and samples are non-detect, results can be reported without re-extraction.

#### **Calculations**

Sample Result Calculation

For internal standard quantitation,

HFPO-DA Response = Area of HFPO-DA \* 13C3 HFPO-DA concentration / area of 13C3 HFPO-DA

Concentration in waters, ug/L = (Cex Vt)/(Vo)

Where:

Cex = Concentration measured in sample extract from the target analyte response (ng/mL)

Vt = Volume of total extract (mL)

Vo = Volume of water extracted (mL)

2. Percent Recovery Calculation

```
Spike Recovery = (SSR-SR)/(SA)x100%
Where:
SSR = Spike sample result
SR = Sample result
SA = Spike added
```

3. Relative Percent Difference Calculation

```
RPD = (SR - DR)/(1/2(SR+DR))x100
Where:
SR = Sample result
DR = Duplicate result
```

**HFPO-DA Analysis Anomalies** 

```
Samples FAY-D-6377TABOR-W1-1-020118 (280-106036-1), FAY-D-6476TABOR-W1-1-020118 (280-106036-2),
FAY-D-6476TABOR-W1-1-020118-D (280-106036-3), FAY-D-6644TABOR-W1-1-020118 (280-106036-4),
FAY-D-6644TABOR-W2-1-020118 (280-106036-5), FAY-D-6808TABOR-W1-1-020118 (280-106036-6),
FAY-D-6838TABOR-W1-1-020118 (280-106036-7), FAY-D-6838TABOR-W2-1-020118 (280-106036-8),
FAY-D-6858TABOR-W1-1-020118 (280-106036-9), FAY-D-7047TABOR-W1-1-020118 (280-106036-10),
FAY-D-5049MATTH-W1-1-020118 (280-106036-11), FAY-D-7646TABOR-W1-1-020118 (280-106036-12),
FAY-D-6731BUTLE-W1-1-020118 (280-106036-13), FAY-D-6731BUTLE-W1-2-020118 (280-106036-14),
FAY-D-6815BUTLE-W1-1-020118 (280-106036-15), FAY-D-6893BUTLE-W1-1-020118 (280-106036-16),
FAY-D-5018MRSHR-W1-1-020118 (280-106036-17), FAY-D-5018MRSHR-W1-2-020118 (280-106036-18),
FAY-D-5021MRSHR-W1-1-020118 (280-106036-19), FAY-D-5021MRSHR-W1-2-020118 (280-106036-20),
FAY-D-4065SPNSH-W1-1-020118 (280-106036-21), FAY-D-4065SPNSH-W1-2-020118 (280-106036-22),
FAY-D-4057SPNSH-W1-1-020118 (280-106036-23), FAY-D-7265NC87H-W1-1-020118 (280-106036-24),
FAY-D-7394NC87H-W1-1-020118 (280-106036-25), FAY-D-6711CHKFT-W1-1-020118 (280-106036-26),
FAY-D-6416CHKFT-W1-1-020118 (280-106036-27), FAY-D-6591BUTLE-W1-1-020118 (280-106036-28),
FAY-D-7149BUTLE-W1-1-020118 (280-106036-29), FAY-D-7243BUTLE-W1-1-020118 (280-106036-30),
FAY-D-5049MATTH-W1-1-020118-D (280-106036-31), FAY-D-7609TABOR-W1-1-020118 (280-106036-32).
FAY-D-7741TABOR-W1-1-020118 (280-106036-33), FAY-D-FB-020118-B (280-106036-34), FAY-D-47MAÚDI-W1-1-020118
(280-106036-35), FAY-D-47MAUDI-W1-2-020118 (280-106036-36), FAY-D-1123NC20H-W1-1-020118 (280-106036-37),
FAY-D-3322DANDE-W1-1-020118 (280-106036-38), FAY-D-3322DANDE-W1-1-020118D (280-106036-39),
FAY-D-4057SPNSH-W1-2-020118 (280-106036-40), FAY-D-5085MRSHR-W1-1-020118 (280-106036-41), FAY-D-FB-020118
(280-106036-42) and FAY-D-FB-020118-A (280-106036-43) were analyzed for Perfluorinated Hydrocarbons in accordance with
DV-LC-0012. The samples were prepared on 02/09/2018, 02/11/2018, 02/12/2018 and 02/13/2018 and analyzed on 02/12/2018,
02/13/2018 and 02/14/2018.
```

Calibration 9 (STD125) has been included in the raw data, but was not used in the Initial Calibration (ICAL).

Reporting limits have been adjusted accordingly for the initial volumes extracted.

The project required MS and Sample Duplicate could not be performed for prep batches 280-404556, 280-404557 and 280-404582, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

The Sample Duplicate analysis data associated with prep batch 280-404785 was performed on sample FAY-D-3322DANDE-W1-1-020118 (280-106036-38). The RPD data were not calculable as the parent and duplicate results were less than the reporting limit.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6377TABOR-W1- 1-020118	280-106036-1	2/1/2018 8:47	2/2/2018	2/12/2018	0.012

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-2	115%

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6476TABOR-W1- 1-020118	280-106036-2	2/1/2018 9:22	2/2/2018	2/12/2018	0.038

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

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280-106036-2	115%

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Michelle A. Johnston, Project Manager

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<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6476TABOR-W1- 1-020118-D	280-106036-3	2/1/2018 9:22	2/2/2018	2/12/2018	0.038

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-11	94%

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6644TABOR-W1- 1-020118	280-106036-4	2/1/2018 9:56	2/2/2018	2/12/2018	<0.010

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-11	94%

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6644TABOR-W2- 1-020118	280-106036-5	2/1/2018 9:57	2/2/2018	2/12/2018	<0.010

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries	
280-106036-11	94%	

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<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6808TABOR-W1- 1-020118	280-106036-6	2/1/2018 10:45	2/2/2018	2/12/2018	0.010

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries	
280-106036-11	94%	

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<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6838TABOR-W1- 1-020118	280-106036-7	2/1/2018 11:03	2/2/2018	2/12/2018	0.012

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

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For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries	
280-106036-11	94%	

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<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6838TABOR-W2- 1-020118	280-106036-8	2/1/2018 11:04	2/2/2018	2/12/2018	0.010

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries	
280-106036-11	94%	

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6858TABOR-W1- 1-020118	280-106036-9	2/1/2018 11:13	2/2/2018	2/12/2018	0.025

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries	
280-106036-11	94%	

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 7047TABOR-W1- 1-020118	280-106036-10	2/1/2018 11:51	2/2/2018	2/12/2018	0.13

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries	
280-106036-11	94%	

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 5049MATTH-W1- 1-020118	280-106036-11	2/1/2018 13:48	2/2/2018	2/12/2018	0.11

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries	
280-106036-11	94%	

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 7646TABOR-W1- 1-02018	280-106036-12	2/1/2018 14:55	2/2/2018	2/12/2018	0.029

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries	
280-106036-11	94%	

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6731BUTLE-W1- 1-020118	280-106036-13	2/1/2018 8:24	2/2/2018	2/12/2018	<0.010

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries	
280-106036-11	94%	

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6731BUTLE-W1- 2-020118	280-106036-14	2/1/2018 8:26	2/2/2018	2/12/2018	<0.010

<sup>#</sup> HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries	
280-106036-11	94%	

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6815BUTLE-W1- 1-020118	280-106036-15	2/1/2018 8:53	2/2/2018	2/12/2018	0.021

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries	
280-106036-11	94%	

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6893BUTLE-W1- 1-020118	280-106036-16	2/1/2018 9:44	2/2/2018	2/12/2018	0.042

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries	
280-106036-11	94%	

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 5018MRSHR- W1-1-020118	280-106036-17	2/1/2018 11:13	2/2/2018	2/12/2018	0.031

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-11	94%

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 5018MRSHR- W1-2-020118	280-106036-18	2/1/2018 11:13	2/2/2018	2/12/2018	0.023

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-11	94%

SUBMITTED BY:

4/2/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 5021MRSHR- W1-1-020118	280-106036-19	2/1/2018 11:44	2/2/2018	2/12/2018	0.015

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

#### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404556, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 5021MRSHR- W1-2-020118	280-106036-20	2/1/2018 11:48	2/2/2018	2/12/2018	<0.010

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

#### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404556, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 4065SPNSH-W1- 1-020118	280-106036-21	2/1/2018 13:51	2/2/2018	2/12/2018	0.037

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

#### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404556, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L – micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 4065SPNSH-W1- 2-020118	280-106036-22	2/1/2018 13:55	2/2/2018	2/12/2018	0.029

<sup>#</sup> HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

#### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404556, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 4057SPNSH-W1- 1-020118	280-106036-23	2/1/2018 14:34	2/2/2018	2/12/2018	0.026

<sup>#</sup> HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

#### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404557, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

3/29/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 7265NC87H-W1- 1-020118	280-106036-24	2/1/2018 9:26	2/2/2018	2/12/2018	0.026

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

#### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404557, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 7394NC87H-W1- 1-020118	280-106036-25	2/1/2018 10:42	2/2/2018	2/12/2018	0.048

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

#### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404557, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6711CHKFT-W1- 1-020118	280-106036-26	2/1/2018 11:52	2/2/2018	2/12/2018	0.083

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

#### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404557, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6416CHKFT-W1- 1-020118	280-106036-27	2/1/2018 12:04	2/2/2018	2/14/2018	0.052

<sup>#</sup> HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-38	95%

SUBMITTED BY:

3/29/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 6591BUTLE-W1- 1-020118	280-106036-28	2/1/2018 14:38	2/2/2018	2/14/2018	0.016

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-38	95%

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 7149BUTLE-W1- 1-020118	280-106036-29	2/1/2018 15:03	2/2/2018	2/14/2018	0.061

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-38	95%

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 7243BUTLE-W1- 1-020118	280-106036-30	2/1/2018 17:11	2/2/2018	2/14/2018	0.089

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-38	95%

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 5049MATTH-W1- 1-020118-D	280-106036-31	2/1/2018 13:48	2/2/2018	2/14/2018	0.12

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-38	95%

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L – micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 7609TABOR-W1- 1-020118	280-106036-32	2/1/2018 14:41	2/2/2018	2/14/2018	0.15

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-38	95%

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L – micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 7741TABOR-W1- 1-020118	280-106036-33	2/1/2018 15:08	2/2/2018	2/14/2018	0.10

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-38	95%

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-FB- 020118-B	280-106036-34	2/1/2018 17:00	2/2/2018	2/14/2018	<0.010

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-38	95%

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L – micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-47MAUDI- W1-1-020118	280-106036-35	2/1/2018 9:00	2/2/2018	2/14/2018	0.016

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-38	95%

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L – micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-47MAUDI- W1-2-020118	280-106036-36	2/1/2018 9:05	2/2/2018	2/14/2018	0.015

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-38	95%

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L – micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 1123NC20H-W1- 1-020118	280-106036-37	2/1/2018 9:43	2/2/2018	2/14/2018	0.018

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-38	95%

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 3322DANDE-W1- 1-020118	280-106036-38	2/1/2018 16:30	2/2/2018	2/14/2018	<0.010

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:

Acceptable Range: 70%-130%

TestAmerica Sample ID	Matrix Spike Recoveries
280-106036-38	95%

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 3322DANDE-W1- 1-020118D	280-106036-39	2/1/2018 16:30	2/2/2018	2/13/2018	<0.010

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

#### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404582, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 4057SPNSH-W1- 2-020118	280-106036-40	2/1/2018 14:35	2/2/2018	2/13/2018	0.022

<sup>#</sup> HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

#### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404582, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

3/29/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D- 5085MRSHR- W1-1-020118	280-106036-41	2/1/2018 17:10	2/2/2018	2/13/2018	<0.010

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

#### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404582, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-FB- 020118	280-106036-42	2/1/2018 7:55	2/2/2018	2/13/2018	<0.010

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404582, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

Michelle A fortist

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)



Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-FB- 020118-A	280-106036-43	2/1/2018 13:00	2/2/2018	2/13/2018	<0.010

<sup>#</sup> HFPO-DA - hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

#### **DEFINITIONS:**

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

#### RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

### Matrix Spike Recoveries:

Acceptable Range: 70%-130%

The project required MS and Sample Duplicate could not be performed for prep batch 280-404582, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/16/2018

Michelle A. Johnston, Project Manager

Michelle A fortist

<sup>&</sup>lt; = less than the stated value

<sup>\*\*</sup> ug/L - micrograms/liter (parts per billion)

#### 8321A: HFPO-DA

		002 IA . III F O-L	<b>7</b> 0		
			Individual	Final	
			Result	Result	
Lab Sample ID	Client Sample ID	Analyte	(ug/L)	(ug/L)	RL
280-106036-1	FAY-D-6377TABOR-W1-1-020118	HFPO-DA	0.012	0.012	0.010
280-106036-2	FAY-D-6476TABOR-W1-1-020118	HFPO-DA	0.036	0.038	0.010
280-106036-2 DU	FAY-D-6476TABOR-W1-1-020118	HFPO-DA	0.040		0.010
280-106036-3	FAY-D-6476TABOR-W1-1-020118-D	HFPO-DA	0.038	0.038	0.010
280-106036-4	FAY-D-6644TABOR-W1-1-020118	HFPO-DA	<0.010	< 0.010	0.010
280-106036-5	FAY-D-6644TABOR-W2-1-020118	HFPO-DA	<0.010	< 0.010	0.010
280-106036-6	FAY-D-6808TABOR-W1-1-020118	HFPO-DA	0.010	0.010	0.010
280-106036-7	FAY-D-6838TABOR-W1-1-020118	HFPO-DA	0.012	0.012	0.010
280-106036-8	FAY-D-6838TABOR-W2-1-020118	HFPO-DA	0.010	0.010	0.010
280-106036-9	FAY-D-6858TABOR-W1-1-020118	HFPO-DA	0.025	0.025	0.010
280-106036-10	FAY-D-7047TABOR-W1-1-020118	HFPO-DA	0.13	0.13	0.010
280-106036-11	FAY-D-5049MATTH-W1-1-020118	HFPO-DA	0.11	0.11	0.010
280-106036-11 DU	FAY-D-5049MATTH-W1-1-020118	HFPO-DA	0.11		0.010
280-106036-12	FAY-D-7646TABOR-W1-1-02018	HFPO-DA	0.029	0.029	0.010
280-106036-13	FAY-D-6731BUTLE-W1-1-020118	HFPO-DA	<0.010	< 0.010	0.010
280-106036-14	FAY-D-6731BUTLE-W1-2-020118	HFPO-DA	<0.010	< 0.010	0.010
280-106036-15	FAY-D-6815BUTLE-W1-1-020118	HFPO-DA	0.021	0.021	0.010
280-106036-16	FAY-D-6893BUTLE-W1-1-020118	HFPO-DA	0.042	0.042	0.010
280-106036-17	FAY-D-5018MRSHR-W1-1-020118	HFPO-DA	0.031	0.031	0.010
280-106036-18	FAY-D-5018MRSHR-W1-2-020118	HFPO-DA	0.023	0.023	0.010
280-106036-19	FAY-D-5021MRSHR-W1-1-020118	HFPO-DA	0.015	0.015	0.010
280-106036-20	FAY-D-5021MRSHR-W1-2-020118	HFPO-DA	<0.010	< 0.010	0.010
280-106036-21	FAY-D-4065SPNSH-W1-1-020118	HFPO-DA	0.037	0.037	0.010
280-106036-22	FAY-D-4065SPNSH-W1-2-020118	HFPO-DA	0.029	0.029	0.010
280-106036-23	FAY-D-4057SPNSH-W1-1-020118	HFPO-DA	0.026	0.026	0.010
280-106036-24	FAY-D-7265NC87H-W1-1-020118	HFPO-DA	0.026	0.026	0.010
280-106036-25	FAY-D-7394NC87H-W1-1-020118	HFPO-DA	0.048	0.048	0.010
280-106036-26	FAY-D-6711CHKFT-W1-1-020118	HFPO-DA	0.083	0.083	0.010
280-106036-27	FAY-D-6416CHKFT-W1-1-020118	HFPO-DA	0.052	0.052	0.010
280-106036-28	FAY-D-6591BUTLE-W1-1-020118	HFPO-DA	0.016	0.016	0.010
280-106036-29	FAY-D-7149BUTLE-W1-1-020118	HFPO-DA	0.061	0.061	0.010
280-106036-30	FAY-D-7243BUTLE-W1-1-020118	HFPO-DA	0.089	0.089	0.010
280-106036-31	FAY-D-5049MATTH-W1-1-020118-D	HFPO-DA	0.12	0.12	0.010
280-106036-32	FAY-D-7609TABOR-W1-1-020118	HFPO-DA	0.15	0.15	0.010
280-106036-33	FAY-D-7741TABOR-W1-1-020118	HFPO-DA	0.10	0.10	0.010
280-106036-34	FAY-D-FB-020118-B	HFPO-DA	<0.010	< 0.010	0.010
280-106036-35	FAY-D-47MAUDI-W1-1-020118	HFPO-DA	0.016	0.016	0.010
280-106036-36	FAY-D-47MAUDI-W1-2-020118	HFPO-DA	0.015	0.015	0.010
280-106036-37	FAY-D-1123NC20H-W1-1-020118	HFPO-DA	0.018	0.018	0.010
280-106036-38	FAY-D-3322DANDE-W1-1-020118	HFPO-DA	<0.010	< 0.010	0.010
280-106036-38 DU	FAY-D-3322DANDE-W1-1-020118	HFPO-DA	<0.010		0.010

<sup>(</sup>a) Method 8321A

Job Number: 280-106036-1

<sup>(</sup>b) DUP or REP indicates a laboratory duplicate.

<sup>(</sup>c) If the sample and laboratory duplicate are both greater than 5X the RL and the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher of the sample and laboratory duplicate value is reported. If the sample and/or laboratory duplicate are less than 5X the RL, and the absolute difference between the sample and laboratory duplicate is less than the RL, the average value is reported. If the absolute difference is greater than the RL, the higher of the sample and laboratory duplicate value is reported. If either the sample or the duplicate result is greater than or equal to the RL and the other is less than the RL, then the higher of the two is reported.

<sup>(</sup>d) Moisture Determined by ASTM D2216.

<sup>(</sup>e) Reporting Limit (RL) = The concentration equivalent to the low calibration standard.

### **Executive Summary**

Client: Chemours Company FC, LLC The Job Number: 280-106036-1

8321A: HFPO-DA

			Individual Result	Final Result	
Lab Sample ID	Client Sample ID	Analyte	(ug/L)	(ug/L)	RL
280-106036-39	FAY-D-3322DANDE-W1-1-020118D	HFPO-DA	<0.010	<0.010	0.010
280-106036-40	FAY-D-4057SPNSH-W1-2-020118	HFPO-DA	0.022	0.022	0.010
280-106036-41	FAY-D-5085MRSHR-W1-1-020118	HFPO-DA	<0.010	< 0.010	0.010
280-106036-42	FAY-D-FB-020118	HFPO-DA	<0.010	< 0.010	0.010
280-106036-43	FAY-D-FB-020118-A	HFPO-DA	<0.010	<0.010	0.010

<sup>(</sup>a) Method 8321A

<sup>(</sup>b) DUP or REP indicates a laboratory duplicate.

<sup>(</sup>c) If the sample and laboratory duplicate are both greater than 5X the RL and the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher of the sample and laboratory duplicate value is reported. If the sample and/or laboratory duplicate are less than 5X the RL, and the absolute difference between the sample and laboratory duplicate is less than the RL, the average value is reported. If the absolute difference is greater than the RL, the higher of the sample and laboratory duplicate value is reported. If either the sample or the duplicate result is greater than or equal to the RL and the other is less than the RL, then the higher of the two is reported.

<sup>(</sup>d) Moisture Determined by ASTM D2216.

<sup>(</sup>e) Reporting Limit (RL) = The concentration equivalent to the low calibration standard.

Client: Chemours Company FC, LLC The

Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Client Sample ID: FAY	′-D-6377TABC	)R-W1-1-	020118			Lab Sa	mple ID:	280-106036-1
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
HFPO-DA	0.012		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FA\	′-D-6476TABC	)R-W1-1-	020118			Lab Sa	mple ID:	280-106036-2
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
HFPO-DA	0.036		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FAY	′-D-6476TABC	)R-W1-1-	020118-D			Lab Sa	mple ID:	280-106036-3
Analyte		Qualifier	RL	MDL		Dil Fac	D Method	Prep Type
HFPO-DA	0.038		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FA\	′-D-6644TABC	)R-W1-1-	020118			Lab Sa	mple ID:	280-106036-4
No Detections.								
Client Sample ID: FA\	′-D-6644TABC	)R-W2-1-	020118			Lab Sa	mple ID:	280-106036-5
No Detections.								
Client Sample ID: FAY	′-D-6808TABC	)R-W1-1-	020118			Lab Sa	mple ID:	280-106036-6
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
HFPO-DA	0.010		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FA\	/-D-6838TABC	)R-W1-1-	020118			Lab Sa	mple ID:	280-106036-7
Analyte		Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
HFPO-DA	0.012		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FA\	′-D-6838TABC	)R-W2-1-	020118			Lab Sa	mple ID:	280-106036-8
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
HFPO-DA	0.010		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FA\	′-D-6858TABC	)R-W1-1-	020118			Lab Sa	mple ID:	280-106036-9
Analyte		Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
HFPO-DA	0.025		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FA\	′-D-7047TABC	)R-W1-1-	020118			Lab San	ple ID: 2	280-106036-10
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
HFPO-DA	0.13		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FA\	′-D-5049MATT	"H-W1-1-	020118			Lab San	nple ID: 2	280-106036-11
Analyte		Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
HFPO-DA	0.11	-	0.010		ug/L	1	8321A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Chemours Company FC, LLC The

Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
HFPO-DA	0.029		0.010		ug/L		8321A	Total/NA
Client Sample ID: F	AY-D-6731BUTL	E-W1-1-0	20118			Lab Samı	ile ID: 28	0-106036-13
No Detections.								
Client Sample ID: F	AY-D-6731BUTL	E-W1-2-0	20118			Lab Samı	ole ID: 28	0-106036-14
No Detections.								
Client Sample ID: F	AY-D-6815BUTL	E-W1-1-0	20118			Lab Samı	le ID: 28	0-106036-1
Analyte		Qualifier	RL	MDL		Dil Fac D		Prep Type
HFPO-DA	0.021		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: F	AY-D-6893BUTL	E-W1-1-0	20118			Lab Samı	ie ID: 28	0-106036-16
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
HFPO-DA	0.042	·	0.010		ug/L		8321A	Total/NA
Client Sample ID: F	AY-D-5018MRSH	IR-W1-1-(	)20118			Lab Samı	ie ID: 28	0-106036-17
Analyte		Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
HFPO-DA	0.031		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: F	AY-D-5018MRSH	1R-W1-2-(	)20118			Lab Samı	le ID: 28	0-106036-1
Analyte		Qualifier	RL	MDL		Dil Fac D		Prep Type
HFPO-DA	0.023		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: F	AY-D-5021MRSH	1R-W1-1-(	)20118			Lab Samı	le ID: 28	0-106036-1
Analyte		Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
HFPO-DA	0.015		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: F	AY-D-5021MRSI	1R-W1-2-(	)20118			Lab Samı	ie ID: 28	0-106036-20
No Detections.								
Client Sample ID: F	AY-D-4065SPNS	H-W1-1-0	20118			Lab Samı	ie ID: 28	0-106036-2
_ Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
HFPO-DA	0.037		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: F	AY-D-4065SPNS	H-W1-2-0	20118			Lab Samı	ie ID: 28	0-106036-2
Analyte HFPO-DA		Qualifier	RL	MDL		Dil Fac D		Prep Type
	0.029		0.010		ug/L	1	8321A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Chemours Company FC, LLC The

Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D I	Method	Prep Type
HFPO-DA	0.026		0.010		ug/L	1	_ 8	3321A	Total/NA
lient Sample ID: F	AY-D-7265NC87	H-W1-1-0;	20118			Lab Sar	npi	e ID: 28	0-106036-24
 Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D N	Method	Prep Type
HFPO-DA	0.026		0.010		ug/L	1	_ 8	3321A	Total/NA
Client Sample ID: F	AY-D-7394NC87	H-W1-1-0;	20118			Lab Sar	npi	e ID: 28	0-106036-2
_ Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D N	Method	Prep Type
HFPO-DA	0.048		0.010		ug/L	1	_ 8	3321A	Total/NA
Client Sample ID: F	AY-D-6711CHKF	T-W1-1-0	20118			Lab Sar	npl	e ID: 28	0-106036-20
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D N	Method	Prep Type
HFPO-DA	0.083		0.010		ug/L	1	_ 8	3321A	Total/NA
Client Sample ID: F	AY-D-6416CHKF	T-W1-1-0	20118			Lab Sar	npi	e ID: 28	0-106036-2
_ Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D N	Method	Prep Type
HFPO-DA	0.052		0.010		ug/L	1	- 8	3321A	Total/NA
Client Sample ID: F	AY-D-6591BUTL	E-W1-1-0	20118			Lab Sar	npi	e ID: 28	0-106036-2
 Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D N	Method	Prep Type
HFPO-DA	0.016		0.010		ug/L	1	- 8	3321A	Total/NA
Client Sample ID: F	AY-D-7149BUTL	E-W1-1-0	20118			Lab Sar	npl	e ID: 28	0-106036-2!
 Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D N	/lethod	Prep Type
HFPO-DA	0.061		0.010		ug/L	1	8	3321A	Total/NA
Client Sample ID: F	AY-D-7243BUTL	E-W1-1-0	20118			Lab Sar	npl	e ID: 28	0-106036-30
 Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D N	Method	Prep Type
HFPO-DA	0.089		0.010		ug/L	1	8	3321A	Total/NA
Client Sample ID: F	AY-D-5049MATT	H-W1-1-0	20118-D			Lab Sar	npi	e ID: 28	0-106036-3 <sup>.</sup>
_ Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D N	/lethod	Prep Type
HFPO-DA	0.12		0.010		ug/L	1	8	3321A	Total/NA
Client Sample ID: F	AY-D-7609TABC	IR-W1-1-0	20118			Lab Sar	npi	e ID: 28	0-106036-3
Analyte		Qualifier	RL	MDL	Unit	Dil Fac			Prep Type
HFPO-DA	0.15		0.010		ug/L	1	8	3321A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Chemours Company FC, LLC The

Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Client Sample ID: FAY-D-7741 (Continued)	TABO	R-W1-1-0	20118			Lab Samı	ole ID: 2	80-106036-33
Analyte		Qualifier	RL	MDL	Unit	Dil Fac D		Prep Type
HFPO-DA	0.10		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FAY-D-FB-0:	20118	-B				Lab Samı	ole ID: 2	80-106036-34
No Detections.								
Client Sample ID: FAY-D-47MA	۱-۱DDI	N1-1-020	118			Lab Samı	ole ID: 2	80-106036-35
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
HFPO-DA	0.016		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FAY-D-47MA	۱UDI-۱	N1-2-020	118			Lab Samı	ole ID: 2	80-106036-36
Analyte		Qualifier	RL	MDL	Unit	Dil Fac D		Prep Type
HFPO-DA	0.015		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FAY-D-1123	NC20I	H-W1-1-0	20118			Lab Samı	ole ID: 2	80-106036-37
Analyte		Qualifier	RL	MDL	Unit	Dil Fac D		Prep Type
HFPO-DA	0.018		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FAY-D-3322	DAND	E-W1-1-0	20118			Lab Samı	ole ID: 2	80-106036-38
No Detections.								
Client Sample ID: FAY-D-3322	DAND	E-W1-1-0	20118D			Lab Samı	ole ID: 2	80-106036-39
No Detections.								
Client Sample ID: FAY-D-4057	SPNS	H-W1-2-0	20118			Lab Samı	ole ID: 2	80-106036-40
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
HFPO-DA	0.022		0.010		ug/L	1	8321A	Total/NA
Client Sample ID: FAY-D-5085	MRSH	IR-W1-1-(	)20118			Lab Samı	ole ID: 2	80-106036-41
No Detections.								
Client Sample ID: FAY-D-FB-0	20118					Lab Samı	ole ID: 2	80-106036-42
No Detections.								
Client Sample ID: FAY-D-FB-0	20118	-A				Lab Samı	ole ID: 2	80-106036-43
No Detections.								

This Detection Summary does not include radiochemical test results.

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-1 Client Sample ID: FAY-D-6377TABOR-W1-1-020118

Date Collected: 02/01/18 08:47 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.012	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/09/18 20:54	Analyzed 02/12/18 13:55	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200				Prepared 02/09/18 20:54	Analyzed 02/12/18 13:55	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-2 Client Sample ID: FAY-D-6476TABOR-W1-1-020118

Date Collected: 02/01/18 09:22 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.036		0.010		ug/L		02/09/18 20:54	02/12/18 13:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	71		50 - 200				02/09/18 20:54	02/12/18 13:58	1

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-3 Client Sample ID: FAY-D-6476TABOR-W1-1-020118-D

Date Collected: 02/01/18 09:22 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-D Analyte	A Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
HFPO-DA	0.038	0.010	ug/L	02/11/18 11:55	02/12/18 14:53	1
Surrogate	%Recovery Qualifier			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	70	50 - 200		02/11/18 11:55	02/12/18 14:53	1

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-4 Client Sample ID: FAY-D-6644TABOR-W1-1-020118

Date Collected: 02/01/18 09:56 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO Analyte	P-DA Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010	0.010	ug/L	02/11/18 11:55	02/12/18 14:57	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	80	50 - 200		02/11/18 11:55	02/12/18 14:57	

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-6644TABOR-W2-1-020118 Lab Sample ID: 280-106036-5

Date Collected: 02/01/18 09:57 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO- Analyte	-DA Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010	0.010	ug/L	02/11/18 11:5	5 02/12/18 15:03	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	68	50 - 200		02/11/18 11:5	5 02/12/18 15:03	

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-6 Client Sample ID: FAY-D-6808TABOR-W1-1-020118

Date Collected: 02/01/18 10:45 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.010	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/11/18 11:55	Analyzed 02/12/18 15:06	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200				<b>Prepared</b> 02/11/18 11:55	Analyzed 02/12/18 15:06	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-6838TABOR-W1-1-020118 Lab Sample ID: 280-106036-7

Date Collected: 02/01/18 11:03 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result Qualifie	r RL 0.010	MDL Unit	D Prepared 02/11/18 11:55	Analyzed 02/12/18 15:10	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery Qualifie	<i>r Limits</i> 50 - 200		<b>Prepared</b> 02/11/18 11:55	Analyzed 02/12/18 15:10	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-8 Client Sample ID: FAY-D-6838TABOR-W2-1-020118

Date Collected: 02/01/18 11:04 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.010		0.010		ug/L		02/11/18 11:55	02/12/18 15:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	69		50 - 200				02/11/18 11:55	02/12/18 15:13	1

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-6858TABOR-W1-1-020118 Lab Sample ID: 280-106036-9

Date Collected: 02/01/18 11:13 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.025		0.010		ug/L		02/11/18 11:55	02/12/18 15:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	71		50 - 200				02/11/18 11:55	02/12/18 15:16	1

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-10 Client Sample ID: FAY-D-7047TABOR-W1-1-020118

Date Collected: 02/01/18 11:51 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.13	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/11/18 11:55	Analyzed 02/12/18 15:19	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200		-		<b>Prepared</b> 02/11/18 11:55	Analyzed 02/12/18 15:19	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-5049MATTH-W1-1-020118 Lab Sample ID: 280-106036-11

Date Collected: 02/01/18 13:48

Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.11	Qualifier	RL 0.010	MDL	Unit ug/L	<u>D</u>	Prepared 02/11/18 11:55	Analyzed 02/12/18 15:23	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200				Prepared 02/11/18 11:55	<b>Analyzed</b> 02/12/18 15:23	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-12 Client Sample ID: FAY-D-7646TABOR-W1-1-02018

Date Collected: 02/01/18 14:55 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.029		0.010		ug/L		02/11/18 11:55	02/12/18 15:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	69		50 - 200				02/11/18 11:55	02/12/18 15:32	1

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-6731BUTLE-W1-1-020118 Lab Sample ID: 280-106036-13

Date Collected: 02/01/18 08:24 Date Received: 02/02/18 09:45 Matrix: Water

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result   <0.010	Qualifier	RL 0.010	MDL	Unit ug/L	<u>d</u>	Prepared 02/11/18 11:55	Analyzed 02/12/18 15:39	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	<b>Limits</b> 50 - 200				<b>Prepared</b> 02/11/18 11:55	<b>Analyzed</b> 02/12/18 15:39	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-6731BUTLE-W1-2-020118 Lab Sample ID: 280-106036-14

Date Collected: 02/01/18 08:26 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result <0.010	Qualifier	<b>RL</b> 0.010	MDL	Unit ug/L	D	Prepared	Analyzed 02/12/18 15:42	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200		ag, L		Prepared	Analyzed 02/12/18 15:42	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-6815BUTLE-W1-1-020118 Lab Sample ID: 280-106036-15

Date Collected: 02/01/18 08:53 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.021		0.010		ug/L		02/11/18 11:55	02/12/18 15:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	83		50 - 200				02/11/18 11:55	02/12/18 15:45	1

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-16 Client Sample ID: FAY-D-6893BUTLE-W1-1-020118

Date Collected: 02/01/18 09:44 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.042	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/11/18 11:55	Analyzed 02/12/18 15:49	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200		-		<b>Prepared</b> 02/11/18 11:55	Analyzed 02/12/18 15:49	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-17 Client Sample ID: FAY-D-5018MRSHR-W1-1-020118

Date Collected: 02/01/18 11:13 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.031	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/11/18 11:55	Analyzed 02/12/18 15:52	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	<b>Limits</b> 50 - 200				Prepared 02/11/18 11:55	<b>Analyzed</b> 02/12/18 15:52	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-5018MRSHR-W1-2-020118 Lab Sample ID: 280-106036-18

Date Collected: 02/01/18 11:13 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/11/18 11:55	Analyzed 02/12/18 15:55	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200		-9-		<b>Prepared</b> 02/11/18 11:55	<b>Analyzed</b> 02/12/18 15:55	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-19 Client Sample ID: FAY-D-5021MRSHR-W1-1-020118

Date Collected: 02/01/18 11:44 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.015	Qualifier	RL 0.010	MDL	Unit ug/L	<u> </u>	Prepared 02/11/18 19:22	Analyzed 02/12/18 16:15	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200				<b>Prepared</b> 02/11/18 19:22	Analyzed 02/12/18 16:15	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-20 Client Sample ID: FAY-D-5021MRSHR-W1-2-020118

Date Collected: 02/01/18 11:48 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	<b>Result</b> <0.010	Qualifier	RL 0.010	MDL	Unit ug/L	<u>D</u>	Prepared 02/11/18 19:22	Analyzed 02/12/18 16:18	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	<b>Limits</b> 50 - 200				Prepared 02/11/18 19:22	Analyzed 02/12/18 16:18	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-4065SPNSH-W1-1-020118 Lab Sample ID: 280-106036-21

Date Collected: 02/01/18 13:51 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
HFPO-DA	0.037	0.010	ug/L	02/11/18 19:22	02/12/18 16:21	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	67	50 - 200		02/11/18 19:22	02/12/18 16:21	1

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-22 Client Sample ID: FAY-D-4065SPNSH-W1-2-020118

Date Collected: 02/01/18 13:55 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.029	Qualifier	<b>RL</b> 0.010	MDL	Unit ug/L	D	Prepared 02/11/18 19:22	Analyzed 02/12/18 16:25	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	<b>Limits</b> 50 - 200				<b>Prepared</b> 02/11/18 19:22	<b>Analyzed</b> 02/12/18 16:25	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-4057SPNSH-W1-1-020118 Lab Sample ID: 280-106036-23

Date Collected: 02/01/18 14:34 Date Received: 02/02/18 09:45 Matrix: Water

Method: 8321A - HFPO-DA									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.026		0.010		ug/L		02/11/18 19:44	02/12/18 17:49	1

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-24 Client Sample ID: FAY-D-7265NC87H-W1-1-020118

Date Collected: 02/01/18 09:26 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.026	Qualifier	RL 0.010	MDL	Unit ug/L	<u>D</u>	Prepared 02/11/18 19:44	Analyzed 02/12/18 17:53	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	<i>Limits</i> 50 - 200				<b>Prepared</b> 02/11/18 19:44	<b>Analyzed</b> 02/12/18 17:53	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-7394NC87H-W1-1-020118 Lab Sample ID: 280-106036-25

Date Collected: 02/01/18 10:42 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.048	Qualifier	RL 0.010	MDL	Unit ug/L	<u>D</u>	Prepared 02/11/18 19:44	Analyzed 02/12/18 17:56	Dil Fac
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	87		50 - 200				02/11/18 19:44	02/12/18 17:56	

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-6711CHKFT-W1-1-020118 Lab Sample ID: 280-106036-26

Date Collected: 02/01/18 11:52

Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.083	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/11/18 19:44	Analyzed 02/12/18 17:59	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	<b>Limits</b> 50 - 200				<b>Prepared</b> 02/11/18 19:44	<b>Analyzed</b> 02/12/18 17:59	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-27 Client Sample ID: FAY-D-6416CHKFT-W1-1-020118

Date Collected: 02/01/18 12:04 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.052	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/13/18 11:30	Analyzed 02/14/18 08:16	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	<i>Limits</i> 50 - 200				Prepared 02/13/18 11:30	<b>Analyzed</b> 02/14/18 08:16	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-28 Client Sample ID: FAY-D-6591BUTLE-W1-1-020118

Date Collected: 02/01/18 14:38 Matrix: Water Date Received: 02/02/18 09:45

 Method: 8321A - HFPO-DA Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.016		0.010		ug/L		02/13/18 11:30	02/14/18 08:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	77		50 - 200				02/13/18 11:30	02/14/18 08:20	1

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-29 Client Sample ID: FAY-D-7149BUTLE-W1-1-020118

Date Collected: 02/01/18 15:03 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.061	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/13/18 11:30	Analyzed 02/14/18 08:23	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200				Prepared 02/13/18 11:30	Analyzed 02/14/18 08:23	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-30 Client Sample ID: FAY-D-7243BUTLE-W1-1-020118

Date Collected: 02/01/18 17:11

Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.089	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/13/18 11:30	Analyzed 02/14/18 08:26	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery 85	Qualifier	Limits 50 - 200				Prepared 02/13/18 11:30	Analyzed 02/14/18 08:26	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-5049MATTH-W1-1-020118-D Lab Sample ID: 280-106036-31

Date Collected: 02/01/18 13:48 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.12		0.010		ug/L		02/13/18 11:30	02/14/18 08:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	75		50 - 200				02/13/18 11:30	02/14/18 08:30	1

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-32 Client Sample ID: FAY-D-7609TABOR-W1-1-020118

Date Collected: 02/01/18 14:41 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.15	Qualifier	<b>RL</b> 0.010	MDL	Unit ug/L	<u>D</u>	Prepared 02/13/18 11:30	Analyzed 02/14/18 08:33	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	<i>Limits</i> 50 - 200				Prepared 02/13/18 11:30	Analyzed 02/14/18 08:33	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-7741TABOR-W1-1-020118 Lab Sample ID: 280-106036-33

Date Collected: 02/01/18 15:08 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.10	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared	Analyzed 02/14/18 08:39	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200		ug/L		Prepared	Analyzed 02/14/18 08:39	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-34 Client Sample ID: FAY-D-FB-020118-B

Date Collected: 02/01/18 17:00 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	<b>Result</b> <0.010	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/13/18 11:30	Analyzed 02/14/18 08:43	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	<b>Limits</b> 50 - 200				Prepared 02/13/18 11:30	Analyzed 02/14/18 08:43	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-35 Client Sample ID: FAY-D-47MAUDI-W1-1-020118

Date Collected: 02/01/18 09:00 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.016		0.010		ug/L		02/13/18 11:30	02/14/18 08:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	82		50 - 200				02/13/18 11:30	02/14/18 08:46	1

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-36 Client Sample ID: FAY-D-47MAUDI-W1-2-020118

Date Collected: 02/01/18 09:05 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA		Qualifier	RL 0.010	MDL		D	Prepared	Analyzed 02/14/18 08:49	Dil Fac
Surrogate	0.015 %Recovery	Qualifier	Limits		ug/L		Prepared	Analvzed	Dil Fac
13C3 HFPO-DA	81	Qualifier	50 - 200					02/14/18 08:49	1

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-37 Client Sample ID: FAY-D-1123NC20H-W1-1-020118

Date Collected: 02/01/18 09:43 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result 0.018	Qualifier	RL 0.010	MDL	Unit ug/L	<u>D</u>	Prepared 02/13/18 11:30	Analyzed 02/14/18 08:52	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery 75	Qualifier	<i>Limits</i> 50 - 200				Prepared 02/13/18 11:30	<b>Analyzed</b> 02/14/18 08:52	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-38 Client Sample ID: FAY-D-3322DANDE-W1-1-020118

Date Collected: 02/01/18 16:30 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result   <0.010	Qualifier	RL 0.010	MDL	Unit ug/L	<u>D</u>	Prepared 02/13/18 11:30	<b>Analyzed</b> 02/14/18 08:56	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery 82	Qualifier	<i>Limits</i> 50 - 200				Prepared 02/13/18 11:30	<b>Analyzed</b> 02/14/18 08:56	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-39 Client Sample ID: FAY-D-3322DANDE-W1-1-020118D

Date Collected: 02/01/18 16:30 Matrix: Water Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/12/18 08:23	02/13/18 12:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	113		50 - 200				02/12/18 08:23	02/13/18 12:39	

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-4057SPNSH-W1-2-020118 Lab Sample ID: 280-106036-40

Date Collected: 02/01/18 14:35 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.022		0.010		ug/L		02/12/18 08:23	02/13/18 12:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	107		50 - 200				02/12/18 08:23	02/13/18 12:42	

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-5085MRSHR-W1-1-020118 Lab Sample ID: 280-106036-41

Date Collected: 02/01/18 17:10 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result   <0.010	Qualifier	<b>RL</b> 0.010	MDL	Unit ug/L	D	Prepared 02/12/18 08:23	Analyzed 02/13/18 12:45	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200				<b>Prepared</b> 02/12/18 08:23	<b>Analyzed</b> 02/13/18 12:45	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-FB-020118 Lab Sample ID: 280-106036-42

Date Collected: 02/01/18 07:55 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result   <0.010	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/12/18 08:23	Analyzed 02/13/18 12:49	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200				Prepared 02/12/18 08:23	Analyzed 02/13/18 12:49	Dil Fac

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Lab Sample ID: 280-106036-43 Client Sample ID: FAY-D-FB-020118-A

Date Collected: 02/01/18 13:00 Matrix: Water

Date Received: 02/02/18 09:45

Method: 8321A - HFPO-DA Analyte HFPO-DA	Result   <0.010	Qualifier	RL 0.010	MDL	Unit ug/L	D	Prepared 02/12/18 08:23	Analyzed 02/13/18 12:52	Dil Fac
Surrogate 13C3 HFPO-DA	%Recovery	Qualifier	Limits 50 - 200				Prepared 02/12/18 08:23	Analyzed 02/13/18 12:52	Dil Fac

#### **Default Detection Limits**

Client: Chemours Company FC, LLC The

Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Method: 8321A - HFPO-DA

Prep: 3535

 Analyte
 RL
 MDL
 Units
 Method

 HFPO-DA
 0.010
 0.0051
 ug/L
 8321A

#### **Surrogate Summary**

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Method: 8321A - HFPO-DA

Matrix: Water Prep Type: Total/NA

_			Davaget Currente Danayawu (Aggertanga Limita)
		HFPODA	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(50-200)	
280-106036-1	FAY-D-6377TABOR-W1-1-0201	66	
280-106036-2	FAY-D-6476TABOR-W1-1-0201	71	
280-106036-2 DU	FAY-D-6476TABOR-W1-1-0201	66	
280-106036-2 MS			
	FAY-D-6476TABOR-W1-1-0201	63	
280-106036-3	FAY-D-6476TABOR-W1-1-0201	70	
280-106036-4	FAY-D-6644TABOR-W1-1-0201	80	
280-106036-5	FAY-D-6644TABOR-W2-1-0201	68	
280-106036-6	FAY-D-6808TABOR-W1-1-0201	69	
280-106036-7	FAY-D-6838TABOR-W1-1-0201	70	
280-106036-8	FAY-D-6838TABOR-W2-1-0201	69	
280-106036-9	FAY-D-6858TABOR-W1-1-0201	71	
280-106036-10	FAY-D-7047TABOR-W1-1-0201	72	
280-106036-11	FAY-D-5049MATTH-W1-1-0201	77	
280-106036-11 DU	FAY-D-5049MATTH-W1-1-0201	73	
280-106036-11 MS	FAY-D-5049MATTH-W1-1-0201	76	
280-106036-12	FAY-D-7646TABOR-W1-1-0201	69	
280-106036-13	FAY-D-6731BUTLE-W1-1-02011	76	
280-106036-14	FAY-D-6731BUTLE-W1-2-02011	77	
280-106036-15	FAY-D-6815BUTLE-W1-1-0201	83	
280-106036-16	FAY-D-6893BUTLE-W1-1-0201	77	
280-106036-17	FAY-D-5018MRSHR-W1-1-0201	69	
280-106036-18	FAY-D-5018MRSHR-W1-2-0201	73	
280-106036-19	FAY-D-5021MRSHR-W1-1-0201	67	
280-106036-20	FAY-D-5021MRSHR-W1-2-0201	76	
280-106036-21	FAY-D-4065SPNSH-W1-1-0201	67	
280-106036-22	FAY-D-4065SPNSH-W1-2-0201	78	
280-106036-23	FAY-D-4057SPNSH-W1-1-0201	75	
280-106036-24	FAY-D-7265NC87H-W1-1-0201	68	
280-106036-25	FAY-D-7394NC87H-W1-1-0201	87	
280-106036-26	FAY-D-6711CHKFT-W1-1-0201	76	
	FAY-D-6416CHKFT-W1-1-0201		
280-106036-27	=	78 77	
280-106036-28	FAY-D-6591BUTLE-W1-1-0201	77	
280-106036-29	FAY-D-7149BUTLE-W1-1-0201	82	
280-106036-30	FAY-D-7243BUTLE-W1-1-0201	85	
280-106036-31	FAY-D-5049MATTH-W1-1-0201	75	
280-106036-32	FAY-D-7609TABOR-W1-1-0201	71	
280-106036-33	FAY-D-7741TABOR-W1-1-0201	81	
280-106036-34	FAY-D-FB-020118-B	82	
280-106036-35	FAY-D-47MAUDI-W1-1-020118	82	
280-106036-36	FAY-D-47MAUDI-W1-2-020118	81	
280-106036-37	FAY-D-1123NC20H-W1-1-0201	75	
280-106036-38	FAY-D-3322DANDE-W1-1-0201	82	
280-106036-38 DU	FAY-D-3322DANDE-W1-1-0201	78	
280-106036-38 MS	FAY-D-3322DANDE-W1-1-0201	83	
280-106036-39	FAY-D-3322DANDE-W1-1-0201	113	
280-106036-40	FAY-D-4057SPNSH-W1-2-0201	107	
280-106036-41	FAY-D-5085MRSHR-W1-1-0201	118	
280-106036-42	FAY-D-FB-020118	114	
280-106036-43	FAY-D-FB-020118-A	111	

#### **Surrogate Summary**

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Method: 8321A - HFPO-DA (Continued)

Matrix: Water Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		HFPODA	
Lab Sample ID	Client Sample ID	(50-200)	
DLCK 280-404345/13	Lab Control Sample	104	
LCS 280-404518/2-A	Lab Control Sample	74	
LCS 280-404551/2-A	Lab Control Sample	74	
LCS 280-404556/2-A	Lab Control Sample	78	
LCS 280-404557/2-A	Lab Control Sample	78	
LCS 280-404582/2-A	Lab Control Sample	112	
LCS 280-404785/2-A	Lab Control Sample	79	
LCSD 280-404518/3-A	Lab Control Sample Dup	71	
LCSD 280-404551/4-A	Lab Control Sample Dup	79	
LCSD 280-404556/3-A	Lab Control Sample Dup	75	
LCSD 280-404557/3-A	Lab Control Sample Dup	78	
LCSD 280-404582/3-A	Lab Control Sample Dup	112	
LCSD 280-404785/4-A	Lab Control Sample Dup	82	
LLCS 280-404518/4-A	Lab Control Sample	73	
LLCS 280-404551/3-A	Lab Control Sample	82	
LLCS 280-404556/4-A	Lab Control Sample	76	
LLCS 280-404557/4-A	Lab Control Sample	84	
LLCS 280-404582/4-A	Lab Control Sample	119	
LLCS 280-404785/3-A	Lab Control Sample	84	
MB 280-404518/1-A	Method Blank	74	
MB 280-404551/1-A	Method Blank	72	
MB 280-404556/1-A	Method Blank	77	
MB 280-404557/1-A	Method Blank	81	
MB 280-404582/1-A	Method Blank	108	
MB 280-404785/1-A	Method Blank	83	
Surrogate Legend			
HFPODA = 13C3 HFP	O-DA		

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling TestAmerica Job ID: 280-106036-1

Me	thod:	8321A	w	HFP	O-DA

Lab Sample ID: DLCK 280-404345/13 Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Water

Analysis Batch: 404345

Spike DLCK DLCK %Rec. Analyte Added Result Qualifier Unit %Rec Limits HFPO-DA 0.250 < 0.50 ug/L 90 70 - 130

DLCK DLCK

Surrogate %Recovery Qualifier Limits 50 - 200 13C3 HFPO-DA 104

Lab Sample ID: MB 280-404518/1-A Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 404641

Prep Type: Total/NA Prep Batch: 404518

MB MB

RL MDL Unit D Analyte Result Qualifier Prepared Analyzed Dil Fac HFPO-DA <0.010 0.010 ug/L 02/09/18 20:54 02/12/18 13:42

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 13C3 HFPO-DA 74 50 - 200 02/09/18 20:54 02/12/18 13:42

Lab Sample ID: LCS 280-404518/2-A

Matrix: Water

Analysis Batch: 404641

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 404518

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit %Rec

HFPO-DA 0.200 0.203 ug/L 102 70 - 130

LCS LCS

Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 74 50 - 200

Lab Sample ID: LCSD 280-404518/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Water

Analysis Batch: 404641

Prep Type: Total/NA

Prep Batch: 404518

Spike LCSD LCSD %Rec. RPD

Added Limits Analyte Result Qualifier Unit %Rec **RPD** Limit HFPO-DA 0.200 0.212 ug/L 106 70 - 130 4 20

LCSD LCSD

Limits Surrogate %Recovery Qualifier 13C3 HFPO-DA 50 - 200

Lab Sample ID: LLCS 280-404518/4-A Client Sample ID: Lab Control Sample

Matrix: Water Prep Type: Total/NA Analysis Batch: 404641 Prep Batch: 404518

Spike LLCS LLCS %Rec.

Added Limits Analyte Result Qualifier Unit %Rec HFPO-DA 0.0200 0.0223 ug/L 111 70 - 130

LLCS LLCS

Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 73 50 - 200

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Method: 8321A - HFPO-DA (Continued) Lab Sample ID: 280-106036-2 MS Client Sample ID: FAY-D-6476TABOR-W1-1-020118 Matrix: Water Prep Type: Total/NA Analysis Batch: 404641 Prep Batch: 404518 MS MS Sample Sample Spike %Rec. Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits HFPO-DA 0.036 0.176 0.237 ug/L 115 70 - 130 MS MS Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 50 - 200 63 Client Sample ID: FAY-D-6476TABOR-W1-1-020118 Lab Sample ID: 280-106036-2 DU Matrix: Water Prep Type: Total/NA Analysis Batch: 404641 Prep Batch: 404518 DU DU Sample Sample **RPD** Result Qualifier Result Qualifier RPD Limit Analyte Unit D HFPO-DA 0.036 0.0395 ug/L 10 20 DU DU Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 66 50 - 200 Lab Sample ID: MB 280-404551/1-A Client Sample ID: Method Blank Matrix: Water Prep Type: Total/NA Analysis Batch: 404642 Prep Batch: 404551 MB MB RL Analyte Result Qualifier MDL Unit D Prepared Analyzed Dil Fac HFPO-DA <0.010 0.010 ug/L 02/11/18 11:55 02/12/18 14:41 MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 13C3 HFPO-DA 72 50 - 200 02/11/18 11:55 02/12/18 14:41 Lab Sample ID: LCS 280-404551/2-A Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA Analysis Batch: 404642 Prep Batch: 404551 Spike LCS LCS %Rec. Added Result Qualifier Unit %Rec Limits Analyte HFPO-DA 0.200 0.202 ug/L 101 70 - 130 LCS LCS Limits Surrogate %Recovery Qualifier 13C3 HFPO-DA 74 50 - 200 Lab Sample ID: LCSD 280-404551/4-A Client Sample ID: Lab Control Sample Dup Matrix: Water Prep Type: Total/NA

Analysis Batch: 404642 Prep Batch: 404551 Spike LCSD LCSD %Rec. **RPD** Added %Rec Limits RPD Limit Analyte Result Qualifier Unit 5 HFPO-DA 0.200 0.192 ug/L 96 70 - 130 20

LCSD LCSD
gate %Recovery Qualifie

 Surrogate
 %Recovery
 Qualifier
 Limits

 13C3 HFPO-DA
 79
 50 - 200

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling TestAmerica Job ID: 280-106036-1

Lab Sample ID: LLCS 280-404551/3-A Client Sample ID: Lab Control Sample

Matrix: Water Prep Type: Total/NA

Analysis Batch: 404642 Prep Batch: 404551 Spike LLCS LLCS %Rec.

Analyte Added Result Qualifier Unit %Rec Limits HFPO-DA 0.0200 0.0173 ug/L 86 70 - 130

LLCS LLCS

Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 50 - 200 82

Client Sample ID: FAY-D-5049MATTH-W1-1-020118 Lab Sample ID: 280-106036-11 MS

Matrix: Water Prep Type: Total/NA

Analysis Batch: 404642 Prep Batch: 404551 Sample Sample MS MS %Rec. Spike

Limits Result Qualifier Added Analyte Result Qualifier Unit %Rec HFPO-DA 0.11 0.181 0.280 ug/L 94 70 - 130

MS MS

Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 76 50 - 200

Lab Sample ID: 280-106036-11 DU Client Sample ID: FAY-D-5049MATTH-W1-1-020118 Prep Type: Total/NA

Matrix: Water Analysis Batch: 404642

Prep Batch: 404551 Sample Sample DU DU RPD Analyte Result Qualifier Result Qualifier Unit D **RPD** Limit

HFPO-DA 0.11 0.111 ug/L 20

DU DU

Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 73 50 - 200

Lab Sample ID: MB 280-404556/1-A Client Sample ID: Method Blank Matrix: Water Prep Type: Total/NA

Analysis Batch: 404643

Prep Batch: 404556 MB MB

Result Qualifier RL MDL Unit **Analyte** Prepared **Analyzed** Dil Fac 0.010 HFPO-DA <0.010 ug/L 02/11/18 19:22 02/12/18 16:02

MB MB

Limits Surrogate %Recovery Qualifier Prepared Analyzed Dil Fac 13C3 HFPO-DA 77 50 - 200 02/11/18 19:22 02/12/18 16:02

Lab Sample ID: LCS 280-404556/2-A

Matrix: Water Prep Type: Total/NA

Analysis Batch: 404643 Prep Batch: 404556 Spike LCS LCS %Rec.

Added %Rec Limits Analyte Result Qualifier Unit HFPO-DA 0.200 0.192 ug/L 96 70 - 130

LCS LCS

Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 78 50 - 200

TestAmerica Denver

Client Sample ID: Lab Control Sample

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling TestAmerica Job ID: 280-106036-1

Lab Sample ID: LCSD 280-404556/3-A Client Sample ID: Lab Control Sample Dup Matrix: Water Prep Type: Total/NA Analysis Batch: 404643 Prep Batch: 404556 Spike LCSD LCSD %Rec. **RPD** Analyte Added Result Qualifier Unit %Rec Limits RPD Limit HFPO-DA 0.200 0.202 ug/L 101 70 - 130 5 20 LCSD LCSD Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 75 50 - 200 Lab Sample ID: LLCS 280-404556/4-A Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA Analysis Batch: 404643 Prep Batch: 404556 Spike LLCS LLCS %Rec. Limits Added Result Qualifier Analyte Unit D %Rec HFPO-DA 0.0200 0.0186 ug/L 93 70 - 130 LLCS LLCS Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 76 50 - 200 Lab Sample ID: MB 280-404557/1-A Client Sample ID: Method Blank Matrix: Water Prep Type: Total/NA Analysis Batch: 404644 Prep Batch: 404557 MB MB RL Analyte Result Qualifier MDL Unit D Prepared Analyzed Dil Fac HFPO-DA <0.010 0.010 ug/L 02/11/18 19:44 02/12/18 17:36 MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 13C3 HFPO-DA 81 50 - 200 02/11/18 19:44 02/12/18 17:36 Lab Sample ID: LCS 280-404557/2-A Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA Analysis Batch: 404644 Prep Batch: 404557 Spike LCS LCS %Rec. Added %Rec Limits **Analyte** Result Qualifier Unit HFPO-DA 0.200 0.191 ug/L 95 70 - 130 LCS LCS Limits Surrogate %Recovery Qualifier 13C3 HFPO-DA 78 50 - 200 Lab Sample ID: LCSD 280-404557/3-A Client Sample ID: Lab Control Sample Dup Matrix: Water Prep Type: Total/NA Analysis Batch: 404644 Prep Batch: 404557 Spike LCSD LCSD %Rec. **RPD** Added Limits RPD Limit Analyte Result Qualifier Unit %Rec HFPO-DA 0.200 0.203 ug/L 102 70 - 130 6 20 LCSD LCSD Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 78 50 - 200

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Method:	8321A -	HFPO-DA	(Continued)

Lab Sample ID: LLCS 280-404557/4-A Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA Analysis Batch: 404644 Prep Batch: 404557 Spike LLCS LLCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits HFPO-DA 0.0200 0.0190 ug/L 95 70 - 130 LLCS LLCS Surrogate %Recovery Qualifier Limits 50 - 200 13C3 HFPO-DA 84

Lab Sample ID: MB 280-404582/1-A Client Sample ID: Method Blank Matrix: Water Prep Type: Total/NA Analysis Batch: 404879 Prep Batch: 404582 MB MB RL MDL Unit D Analyte Result Qualifier Prepared Analyzed Dil Fac HFPO-DA <0.010 0.010 ug/L 02/12/18 08:23 02/13/18 12:26 MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 13C3 HFPO-DA 108 50 - 200 02/12/18 08:23 02/13/18 12:26

Lab Sample ID: LCS 280-404582/2-A Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA Analysis Batch: 404879 Prep Batch: 404582 Spike LCS LCS %Rec. Added %Rec Limits Analyte Result Qualifier Unit HFPO-DA 0.200 0.157 ug/L 78 70 - 130 LCS LCS Surrogate %Recovery Qualifier Limits

Lab Sample ID: LCSD 280-404582/3-A

Matrix: Water

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analysis Batch: 404879 Prep Batch: 404582 Spike LCSD LCSD %Rec. RPD Limits Added Limit Analyte Result Qualifier Unit %Rec RPD HFPO-DA 0.200 0.157 ug/L 78 70 - 130 0 20

 Surrogate
 %Recovery
 Qualifier
 Limits

 13C3 HFPO-DA
 112
 50 - 200

Lab Sample ID: LLCS 280-404582/4-A

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 404879 Prep Batch: 404582 Spike LLCS LLCS %Rec. Added %Rec Limits Analyte Result Qualifier Unit HFPO-DA 0.0200 0.0167 ug/L 83 70 - 130

 Surrogate
 %Recovery
 Qualifier
 Limits

 13C3 HFPO-DA
 119
 50 - 200

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling TestAmerica Job ID: 280-106036-1

Lab Sample ID: MB 280-404785/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 405022 Prep Batch: 404785 MB MB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac HFPO-DA <0.010 0.010 ug/L 02/13/18 11:30 02/14/18 08:03

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 13C3 HFPO-DA 50 - 200 02/13/18 11:30 02/14/18 08:03 83

> Spike Added

> > 0.200

Spike

LCS LCS

LCSD LCSD

0.201

Result Qualifier

Lab Sample ID: LCS 280-404785/2-A

Matrix: Water

Analysis Batch: 405022

Analyte

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 404785

%Rec.

Limits Unit %Rec ug/L 101 70 - 130

LCS LCS

Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 79 50 - 200

Lab Sample ID: LCSD 280-404785/4-A Client Sample ID: Lab Control Sample Dup

Matrix: Water

HFPO-DA

Analysis Batch: 405022

Prep Type: Total/NA

ug/L

Unit

ug/L

Prep Batch: 404785

%Rec. RPD Limits RPD Limit

Added Result Qualifier Analyte Unit %Rec 5 HFPO-DA 0.200 0.192 ug/L 96 70 - 130 20

LCSD LCSD

Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 82 50 - 200

Lab Sample ID: LLCS 280-404785/3-A Client Sample ID: Lab Control Sample

0.0178

Matrix: Water

HFPO-DA

Analysis Batch: 405022

Prep Type: Total/NA

70 - 130

89

95

Prep Batch: 404785

Prep Type: Total/NA

Spike LLCS LLCS %Rec. Added %Rec Limits Analyte Result Qualifier Unit

0.0200

LLCS LLCS

Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 84 50 - 200

Lab Sample ID: 280-106036-38 MS Client Sample ID: FAY-D-3322DANDE-W1-1-020118

Matrix: Water

Analyte

HFPO-DA

Analysis Batch: 405022

Sample Sample Result Qualifier

Spike Added 0.167

MS MS Result Qualifier 0.157

Prep Batch: 404785 %Rec. Limits %Rec

70 - 130

MS MS

<0.010

Surrogate %Recovery Qualifier Limits 13C3 HFPO-DA 83 50 - 200

# **QC Sample Results**

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling TestAmerica Job ID: 280-106036-1

# Method: 8321A - HFPO-DA (Continued)

Lab Sample ID: 280-1060 Matrix: Water Analysis Batch: 405022	36-38 DU			Client Sample			D: FAY-D-3322DANDE-W1-1-020118 Prep Type: Total/NA Prep Batch: 404785				
	Sample	Sample		DU	DU				RPD		
Analyte	Result	Qualifier		Result	Qualifier	Unit	D	RPD	Limit		
HFPO-DA	<0.010			<0.010		ug/L		NC	20		
	DU	DU									
Surrogate	%Recovery	Qualifier	Limits								
13C3 HFPO-DA	78		50 - 200								

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

# LCMS

LCSD 280-404556/3-A

LLCS 280-404556/4-A

Lab Control Sample Dup

Lab Control Sample

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
DLCK 280-404345/13	Lab Control Sample	Total/NA	Water	8321A	_ <u> </u>
Prep Batch: 404518					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-106036-1	FAY-D-6377TABOR-W1-1-020118	Total/NA	Water	3535	
280-106036-2	FAY-D-6476TABOR-W1-1-020118	Total/NA	Water	3535	
MB 280-404518/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-404518/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-404518/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LLCS 280-404518/4-A	Lab Control Sample	Total/NA	Water	3535	
280-106036-2 MS	FAY-D-6476TABOR-W1-1-020118	Total/NA	Water	3535	
280-106036-2 DU	FAY-D-6476TABOR-W1-1-020118	Total/NA	Water	3535	
rep Batch: 404551					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-106036-3	FAY-D-6476TABOR-W1-1-020118-D	Total/NA	Water	3535	
280-106036-4	FAY-D-6644TABOR-W1-1-020118	Total/NA	Water	3535	
280-106036-5	FAY-D-6644TABOR-W2-1-020118	Total/NA	Water	3535	
280-106036-6	FAY-D-6808TABOR-W1-1-020118	Total/NA	Water	3535	
280-106036-7	FAY-D-6838TABOR-W1-1-020118	Total/NA	Water	3535	
280-106036-8	FAY-D-6838TABOR-W2-1-020118	Total/NA	Water	3535	
280-106036-9	FAY-D-6858TABOR-W1-1-020118	Total/NA	Water	3535	
280-106036-10	FAY-D-7047TABOR-W1-1-020118	Total/NA	Water	3535	
280-106036-11	FAY-D-5049MATTH-W1-1-020118	Total/NA	Water	3535	
280-106036-12	FAY-D-7646TABOR-W1-1-02018	Total/NA	Water	3535	
280-106036-13	FAY-D-6731BUTLE-W1-1-020118	Total/NA	Water	3535	
280-106036-14	FAY-D-6731BUTLE-W1-2-020118	Total/NA	Water	3535	
280-106036-15	FAY-D-6815BUTLE-W1-1-020118	Total/NA	Water	3535	
280-106036-16	FAY-D-6893BUTLE-W1-1-020118	Total/NA	Water	3535	
280-106036-17	FAY-D-5018MRSHR-W1-1-020118	Total/NA	Water	3535	
280-106036-18	FAY-D-5018MRSHR-W1-2-020118	Total/NA	Water	3535	
MB 280-404551/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-404551/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-404551/4-A	Lab Control Sample Dup	Total/NA	Water	3535	
LLCS 280-404551/3-A	Lab Control Sample	Total/NA	Water	3535	
280-106036-11 MS	FAY-D-5049MATTH-W1-1-020118	Total/NA	Water	3535	
280-106036-11 DU	FAY-D-5049MATTH-W1-1-020118	Total/NA	Water	3535	
rep Batch: 404556					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-106036-19	FAY-D-5021MRSHR-W1-1-020118	Total/NA	Water	3535	
280-106036-20	FAY-D-5021MRSHR-W1-2-020118	Total/NA	Water	3535	
280-106036-21	FAY-D-4065SPNSH-W1-1-020118	Total/NA	Water	3535	
280-106036-22	FAY-D-4065SPNSH-W1-2-020118	Total/NA	Water	3535	
MB 280-404556/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-404556/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280 404556/3 A	Lah Control Sample Dun	Total/NA	Mator	3535	

TestAmerica Denver

Total/NA

Total/NA

3535

3535

Water

Water

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

# LCMS (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-106036-23	FAY-D-4057SPNSH-W1-1-020118	Total/NA	Water	3535	
280-106036-24	FAY-D-7265NC87H-W1-1-020118	Total/NA	Water	3535	
280-106036-25	FAY-D-7394NC87H-W1-1-020118	Total/NA	Water	3535	
280-106036-26	FAY-D-6711CHKFT-W1-1-020118	Total/NA	Water	3535	
MB 280-404557/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-404557/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-404557/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LLCS 280-404557/4-A	Lab Control Sample	Total/NA	Water	3535	

# Prep Batch: 404582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-106036-39	FAY-D-3322DANDE-W1-1-020118D	Total/NA	Water	3535	
280-106036-40	FAY-D-4057SPNSH-W1-2-020118	Total/NA	Water	3535	
280-106036-41	FAY-D-5085MRSHR-W1-1-020118	Total/NA	Water	3535	
280-106036-42	FAY-D-FB-020118	Total/NA	Water	3535	
280-106036-43	FAY-D-FB-020118-A	Total/NA	Water	3535	
MB 280-404582/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-404582/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-404582/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LLCS 280-404582/4-A	Lab Control Sample	Total/NA	Water	3535	

### Analysis Batch: 404641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-106036-1	FAY-D-6377TABOR-W1-1-020118	Total/NA	Water	8321A	404518
280-106036-2	FAY-D-6476TABOR-W1-1-020118	Total/NA	Water	8321A	404518
MB 280-404518/1-A	Method Blank	Total/NA	Water	8321A	404518
LCS 280-404518/2-A	Lab Control Sample	Total/NA	Water	8321A	404518
LCSD 280-404518/3-A	Lab Control Sample Dup	Total/NA	Water	8321A	404518
LLCS 280-404518/4-A	Lab Control Sample	Total/NA	Water	8321A	404518
280-106036-2 MS	FAY-D-6476TABOR-W1-1-020118	Total/NA	Water	8321A	404518
280-106036-2 DU	FAY-D-6476TABOR-W1-1-020118	Total/NA	Water	8321A	404518

# Analysis Batch: 404642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-106036-3	FAY-D-6476TABOR-W1-1-020118-D	Total/NA	Water	8321A	404551
280-106036-4	FAY-D-6644TABOR-W1-1-020118	Total/NA	Water	8321A	404551
280-106036-5	FAY-D-6644TABOR-W2-1-020118	Total/NA	Water	8321A	404551
280-106036-6	FAY-D-6808TABOR-W1-1-020118	Total/NA	Water	8321A	404551
280-106036-7	FAY-D-6838TABOR-W1-1-020118	Total/NA	Water	8321A	404551
280-106036-8	FAY-D-6838TABOR-W2-1-020118	Total/NA	Water	8321A	404551
280-106036-9	FAY-D-6858TABOR-W1-1-020118	Total/NA	Water	8321A	404551
280-106036-10	FAY-D-7047TABOR-W1-1-020118	Total/NA	Water	8321A	404551
280-106036-11	FAY-D-5049MATTH-W1-1-020118	Total/NA	Water	8321A	404551
280-106036-12	FAY-D-7646TABOR-W1-1-02018	Total/NA	Water	8321A	404551
280-106036-13	FAY-D-6731BUTLE-W1-1-020118	Total/NA	Water	8321A	404551
280-106036-14	FAY-D-6731BUTLE-W1-2-020118	Total/NA	Water	8321A	404551
280-106036-15	FAY-D-6815BUTLE-W1-1-020118	Total/NA	Water	8321A	404551
280-106036-16	FAY-D-6893BUTLE-W1-1-020118	Total/NA	Water	8321A	404551
280-106036-17	FAY-D-5018MRSHR-W1-1-020118	Total/NA	Water	8321A	404551
280-106036-18	FAY-D-5018MRSHR-W1-2-020118	Total/NA	Water	8321A	404551
MB 280-404551/1-A	Method Blank	Total/NA	Water	8321A	404551

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

# LCMS (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-404551/2-A	Lab Control Sample	Total/NA	Water	8321A	404551
LCSD 280-404551/4-A	Lab Control Sample Dup	Total/NA	Water	8321A	404551
LLCS 280-404551/3-A	Lab Control Sample	Total/NA	Water	8321A	404551
280-106036-11 MS	FAY-D-5049MATTH-W1-1-020118	Total/NA	Water	8321A	404551
280-106036-11 DU	FAY-D-5049MATTH-W1-1-020118	Total/NA	Water	8321A	404551

### Analysis Batch: 404643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-106036-19	FAY-D-5021MRSHR-W1-1-020118	Total/NA	Water	8321A	404556
280-106036-20	FAY-D-5021MRSHR-W1-2-020118	Total/NA	Water	8321A	404556
280-106036-21	FAY-D-4065SPNSH-W1-1-020118	Total/NA	Water	8321A	404556
280-106036-22	FAY-D-4065SPNSH-W1-2-020118	Total/NA	Water	8321A	404556
MB 280-404556/1-A	Method Blank	Total/NA	Water	8321A	404556
LCS 280-404556/2-A	Lab Control Sample	Total/NA	Water	8321A	404556
LCSD 280-404556/3-A	Lab Control Sample Dup	Total/NA	Water	8321A	404556
LLCS 280-404556/4-A	Lab Control Sample	Total/NA	Water	8321A	404556

# Analysis Batch: 404644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-106036-23	FAY-D-4057SPNSH-W1-1-020118	Total/NA	Water	8321A	404557
280-106036-24	FAY-D-7265NC87H-W1-1-020118	Total/NA	Water	8321A	404557
280-106036-25	FAY-D-7394NC87H-W1-1-020118	Total/NA	Water	8321A	404557
280-106036-26	FAY-D-6711CHKFT-W1-1-020118	Total/NA	Water	8321A	404557
MB 280-404557/1-A	Method Blank	Total/NA	Water	8321A	404557
LCS 280-404557/2-A	Lab Control Sample	Total/NA	Water	8321A	404557
LCSD 280-404557/3-A	Lab Control Sample Dup	Total/NA	Water	8321A	404557
LLCS 280-404557/4-A	Lab Control Sample	Total/NA	Water	8321A	404557

# Prep Batch: 404785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-106036-27	FAY-D-6416CHKFT-W1-1-020118	Total/NA	Water	3535	
280-106036-28	FAY-D-6591BUTLE-W1-1-020118	Total/NA	Water	3535	
280-106036-29	FAY-D-7149BUTLE-W1-1-020118	Total/NA	Water	3535	
280-106036-30	FAY-D-7243BUTLE-W1-1-020118	Total/NA	Water	3535	
280-106036-31	FAY-D-5049MATTH-W1-1-020118-D	Total/NA	Water	3535	
280-106036-32	FAY-D-7609TABOR-W1-1-020118	Total/NA	Water	3535	
280-106036-33	FAY-D-7741TABOR-W1-1-020118	Total/NA	Water	3535	
280-106036-34	FAY-D-FB-020118-B	Total/NA	Water	3535	
280-106036-35	FAY-D-47MAUDI-W1-1-020118	Total/NA	Water	3535	
280-106036-36	FAY-D-47MAUDI-W1-2-020118	Total/NA	Water	3535	
280-106036-37	FAY-D-1123NC20H-W1-1-020118	Total/NA	Water	3535	
280-106036-38	FAY-D-3322DANDE-W1-1-020118	Total/NA	Water	3535	
MB 280-404785/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-404785/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-404785/4-A	Lab Control Sample Dup	Total/NA	Water	3535	
LLCS 280-404785/3-A	Lab Control Sample	Total/NA	Water	3535	
280-106036-38 MS	FAY-D-3322DANDE-W1-1-020118	Total/NA	Water	3535	
280-106036-38 DU	FAY-D-3322DANDE-W1-1-020118	Total/NA	Water	3535	

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

# LCMS (Continued)

# Analysis Batch: 404879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-106036-39	FAY-D-3322DANDE-W1-1-020118D	Total/NA	Water	8321A	404582
280-106036-40	FAY-D-4057SPNSH-W1-2-020118	Total/NA	Water	8321A	404582
280-106036-41	FAY-D-5085MRSHR-W1-1-020118	Total/NA	Water	8321A	404582
280-106036-42	FAY-D-FB-020118	Total/NA	Water	8321A	404582
280-106036-43	FAY-D-FB-020118-A	Total/NA	Water	8321A	404582
MB 280-404582/1-A	Method Blank	Total/NA	Water	8321A	404582
LCS 280-404582/2-A	Lab Control Sample	Total/NA	Water	8321A	404582
LCSD 280-404582/3-A	Lab Control Sample Dup	Total/NA	Water	8321A	404582
LLCS 280-404582/4-A	Lab Control Sample	Total/NA	Water	8321A	404582

# Analysis Batch: 405022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-106036-27	FAY-D-6416CHKFT-W1-1-020118	Total/NA	Water	8321A	404785
280-106036-28	FAY-D-6591BUTLE-W1-1-020118	Total/NA	Water	8321A	404785
280-106036-29	FAY-D-7149BUTLE-W1-1-020118	Total/NA	Water	8321A	404785
280-106036-30	FAY-D-7243BUTLE-W1-1-020118	Total/NA	Water	8321A	404785
280-106036-31	FAY-D-5049MATTH-W1-1-020118-D	Total/NA	Water	8321A	404785
280-106036-32	FAY-D-7609TABOR-W1-1-020118	Total/NA	Water	8321A	404785
280-106036-33	FAY-D-7741TABOR-W1-1-020118	Total/NA	Water	8321A	404785
280-106036-34	FAY-D-FB-020118-B	Total/NA	Water	8321A	404785
280-106036-35	FAY-D-47MAUDI-W1-1-020118	Total/NA	Water	8321A	404785
280-106036-36	FAY-D-47MAUDI-W1-2-020118	Total/NA	Water	8321A	404785
280-106036-37	FAY-D-1123NC20H-W1-1-020118	Total/NA	Water	8321A	404785
280-106036-38	FAY-D-3322DANDE-W1-1-020118	Total/NA	Water	8321A	404785
MB 280-404785/1-A	Method Blank	Total/NA	Water	8321A	404785
LCS 280-404785/2-A	Lab Control Sample	Total/NA	Water	8321A	404785
LCSD 280-404785/4-A	Lab Control Sample Dup	Total/NA	Water	8321A	404785
LLCS 280-404785/3-A	Lab Control Sample	Total/NA	Water	8321A	404785
280-106036-38 MS	FAY-D-3322DANDE-W1-1-020118	Total/NA	Water	8321A	404785
280-106036-38 DU	FAY-D-3322DANDE-W1-1-020118	Total/NA	Water	8321A	404785

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Lab Sample ID: 280-106036-1

Client Sample ID: FAY-D-6377TABOR-W1-1-020118

Date Collected: 02/01/18 08:47

Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			279.5 mL	5 mL	404518	02/09/18 20:54	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404641	02/12/18 13:55	AGCM	TAL DEN

Client Sample ID: FAY-D-6476TABOR-W1-1-020118

Lab Sample ID: 280-106036-2

Date Collected: 02/01/18 09:22 Date Received: 02/02/18 09:45 Matrix: Water

	Batch	Batch	D	Dil	Initial	Final	Batch	Prepared	A l 4	1 -1-
Prep Type Total/NA	Type Prep	Method 3535	Run	Factor	Amount 274 mL	Amount 5 mL	Number 404518	or Analyzed 02/09/18 20:54	Analyst CDC	TAL DEN
Total/NA	Analysis	8321A		1			404641	02/12/18 13:58	AGCM	TAL DEN

Client Sample ID: FAY-D-6476TABOR-W1-1-020118-D

Lab Sample ID: 280-106036-3

Matrix: Water

Date Collected: 02/01/18 09:22 Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			275.9 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 14:53	AGCM	TAL DEN

Client Sample ID: FAY-D-6644TABOR-W1-1-020118

Lab Sample ID: 280-106036-4

Matrix: Water

Date Collected: 02/01/18 09:56 Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			264.9 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 14:57	AGCM	TAL DEN

Client Sample ID: FAY-D-6644TABOR-W2-1-020118

Lab Sample ID: 280-106036-5

Matrix: Water

Date Collected: 02/01/18 09:57 Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			293.3 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:03	AGCM	TAL DEN

Client Sample ID: FAY-D-6808TABOR-W1-1-020118

Lab Sample ID: 280-106036-6

Matrix: Water

Date Collected: 02/01/18 10:45 Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared	0 1 4	
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			273.9 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:06	AGCM	TAL DEN

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Client Sample ID: FAY-D-6838TABOR-W1-1-020118

Date Collected: 02/01/18 11:03

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-7

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			271.5 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:10	AGCM	TAL DEN

Client Sample ID: FAY-D-6838TABOR-W2-1-020118

Date Collected: 02/01/18 11:04

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-8 Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			281.2 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:13	AGCM	TAL DEN

Client Sample ID: FAY-D-6858TABOR-W1-1-020118

Date Collected: 02/01/18 11:13

Date Received: 02/02/18 09:45

Matrix:	Water	

Lab Sample ID: 280-106036-9

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			301.4 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:16	AGCM	TAL DEN

Client Sample ID: FAY-D-7047TABOR-W1-1-020118

Date Collected: 02/01/18 11:51

Date Received: 02/02/18 09:45

Lab	Sample	ID:	280-106036-10
			30 00 00 0 X 30 0 6

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			276.9 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:19	AGCM	TAL DEN

Client Sample ID: FAY-D-5049MATTH-W1-1-020118

Date Collected: 02/01/18 13:48

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-11

Lab Sample ID: 280-106036-12

Matrix: Water

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			287.7 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:23	AGCM	TAL DEN

Client Sample ID: FAY-D-7646TABOR-W1-1-02018

Date Collected: 02/01/18 14:55

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			282.4 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:32	AGCM	TAL DEN

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling TestAmerica Job ID: 280-106036-1

Lab Sample ID: 280-106036-13

Client Sample ID: FAY-D-6731BUTLE-W1-1-020118

Date Collected: 02/01/18 08:24 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			293.9 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:39	AGCM	TAL DEN

Client Sample ID: FAY-D-6731BUTLE-W1-2-020118

Lab Sample ID: 280-106036-14 Date Collected: 02/01/18 08:26 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535	-		289.4 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:42	AGCM	TAL DEN

Client Sample ID: FAY-D-6815BUTLE-W1-1-020118

Lab Sample ID: 280-106036-15 Date Collected: 02/01/18 08:53 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			272.2 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:45	AGCM	TAL DEN

Client Sample ID: FAY-D-6893BUTLE-W1-1-020118

Lab Sample ID: 280-106036-16 Date Collected: 02/01/18 09:44 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			287.5 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:49	AGCM	TAL DEN

Client Sample ID: FAY-D-5018MRSHR-W1-1-020118

Date Collected: 02/01/18 11:13 Matrix: Water

Date Received: 02/02/18 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			292.2 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:52	AGCM	TAL DEN

Client Sample ID: FAY-D-5018MRSHR-W1-2-020118

Lab Sample ID: 280-106036-18 Date Collected: 02/01/18 11:13 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			293.3 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:55	AGCM	TAL DEN

TestAmerica Denver

Lab Sample ID: 280-106036-17

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Client Sample ID: FAY-D-5021MRSHR-W1-1-020118

Date Collected: 02/01/18 11:44 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			296.6 mL	5 mL	404556	02/11/18 19:22	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404643	02/12/18 16:15	AGCM	TAL DEN

Client Sample ID: FAY-D-5021MRSHR-W1-2-020118

Lab Sample ID: 280-106036-20 Date Collected: 02/01/18 11:48 Matrix: Water

Date Received: 02/02/18 09:45

<del></del>	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			288.6 mL	5 mL	404556	02/11/18 19:22	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404643	02/12/18 16:18	AGCM	TAL DEN

Client Sample ID: FAY-D-4065SPNSH-W1-1-020118

Lab Sample ID: 280-106036-21 Matrix: Water

Date Collected: 02/01/18 13:51 Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			298.3 mL	5 mL	404556	02/11/18 19:22	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404643	02/12/18 16:21	AGCM	TAL DEN

Client Sample ID: FAY-D-4065SPNSH-W1-2-020118

Lab Sample ID: 280-106036-22 Date Collected: 02/01/18 13:55 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			274.7 mL	5 mL	404556	02/11/18 19:22	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404643	02/12/18 16:25	AGCM	TAL DEN

Client Sample ID: FAY-D-4057SPNSH-W1-1-020118

Date Collected: 02/01/18 14:34 Matrix: Water

Date Received: 02/02/18 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			278.7 mL	5 mL	404557	02/11/18 19:44	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404644	02/12/18 17:49	AGCM	TAL DEN

Client Sample ID: FAY-D-7265NC87H-W1-1-020118

Lab Sample ID: 280-106036-24 Date Collected: 02/01/18 09:26

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			285.2 mL	5 mL	404557	02/11/18 19:44	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404644	02/12/18 17:53	AGCM	TAL DEN

TestAmerica Denver

Matrix: Water

Lab Sample ID: 280-106036-23

Lab Sample ID: 280-106036-19

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling TestAmerica Job ID: 280-106036-1

Lab Sample ID: 280-106036-25

Client Sample ID: FAY-D-7394NC87H-W1-1-020118

Date Collected: 02/01/18 10:42 Matrix: Water

Date Received: 02/02/18 09:45

•••	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			281.8 mL	5 mL	404557	02/11/18 19:44	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404644	02/12/18 17:56	AGCM	TAL DEN

Client Sample ID: FAY-D-6711CHKFT-W1-1-020118

Lab Sample ID: 280-106036-26 Date Collected: 02/01/18 11:52 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			290.1 mL	5 mL	404557	02/11/18 19:44	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404644	02/12/18 17:59	AGCM	TAL DEN

Client Sample ID: FAY-D-6416CHKFT-W1-1-020118

Lab Sample ID: 280-106036-27 Matrix: Water

Date Collected: 02/01/18 12:04 Date Received: 02/02/18 09:45

Batch Batch Dil Initial Final Batch Prepared Type Method Amount Amount Number Prep Type Run Factor or Analyzed Analyst Lab 5 mL Total/NA 3535 296.5 mL 404785 TAL DEN Prep 02/13/18 11:30 DFB1 8321A 405022 Total/NA Analysis 02/14/18 08:16 AGCM TAL DEN

Client Sample ID: FAY-D-6591BUTLE-W1-1-020118

Lab Sample ID: 280-106036-28 Date Collected: 02/01/18 14:38 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			293.3 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:20	AGCM	TAL DEN

Client Sample ID: FAY-D-7149BUTLE-W1-1-020118

Lab Sample ID: 280-106036-29 Date Collected: 02/01/18 15:03 Matrix: Water

Date Received: 02/02/18 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			286.2 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:23	AGCM	TAL DEN

Client Sample ID: FAY-D-7243BUTLE-W1-1-020118

Lab Sample ID: 280-106036-30 Date Collected: 02/01/18 17:11 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			287.8 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:26	AGCM	TAL DEN

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Client Sample ID: FAY-D-5049MATTH-W1-1-020118-D

Date Collected: 02/01/18 13:48

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-31 Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			274.8 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:30	AGCM	TAL DEN

Client Sample ID: FAY-D-7609TABOR-W1-1-020118

Date Collected: 02/01/18 14:41

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			277.2 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:33	AGCM	TAL DEN

Client Sample ID: FAY-D-7741TABOR-W1-1-020118

Date Collected: 02/01/18 15:08

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-33

ronared

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			272.3 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:39	AGCM	TAL DEN

Client Sample ID: FAY-D-FB-020118-B

Date Collected: 02/01/18 17:00

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-34

Matrix: Water

Matrix: Water

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			288.8 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:43	AGCM	TAL DEN

Client Sample ID: FAY-D-47MAUDI-W1-1-020118

Date Collected: 02/01/18 09:00

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-35

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			271.7 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:46	AGCM	TAL DEN

Client Sample ID: FAY-D-47MAUDI-W1-2-020118

Date Collected: 02/01/18 09:05

Date Received: 02/02/18 09:45

403022	02/14/10 00	0	AGGIVI	IAL DEN
Lab	Sample	ID:	280-10	6036-36
			Mati	rix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			276.5 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:49	AGCM	TAL DEN

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Client Sample ID: FAY-D-1123NC20H-W1-1-020118

Date Collected: 02/01/18 09:43

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-37 Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			281.3 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:52	AGCM	TAL DEN

Client Sample ID: FAY-D-3322DANDE-W1-1-020118

Date Collected: 02/01/18 16:30

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-38 Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			288.9 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:56	AGCM	TAL DEN

Client Sample ID: FAY-D-3322DANDE-W1-1-020118D

Date Collected: 02/01/18 16:30

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-39 Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			251.2 mL	5 mL	404582	02/12/18 08:23	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404879	02/13/18 12:39	AGCM	TAL DEN

Client Sample ID: FAY-D-4057SPNSH-W1-2-020118

Date Collected: 02/01/18 14:35

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-40

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			251.9 mL	5 mL	404582	02/12/18 08:23	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404879	02/13/18 12:42	AGCM	TAL DEN

Client Sample ID: FAY-D-5085MRSHR-W1-1-020118

Date Collected: 02/01/18 17:10

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-41 Matrix: Water

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	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250.9 mL	5 mL	404582	02/12/18 08:23	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404879	02/13/18 12:45	AGCM	TAL DEN

Client Sample ID: FAY-D-FB-020118

Date Collected: 02/01/18 07:55

Date Received: 02/02/18 09:45

Lab	Sample	ID:	280-106036-42


Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			248.5 mL	5 mL	404582	02/12/18 08:23	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404879	02/13/18 12:49	AGCM	TAL DEN

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Client Sample ID: FAY-D-FB-020118-A

Date Collected: 02/01/18 13:00

Date Received: 02/02/18 09:45

Lab Sample ID: 280-106036-43

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			246.8 mL	5 mL	404582	02/12/18 08:23	НМА	TAL DEN
Total/NA	Analysis	8321A		1			404879	02/13/18 12:52	AGCM	TAL DEN

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 280-404518/1-A

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404518	02/09/18 20:54	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404641	02/12/18 13:42	AGCM	TAL DEN

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 280-404551/1-A

Matrix: Water

		Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Р	rep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
T	otal/NA	Prep	3535			250 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Т	otal/NA	Analysis	8321A		1			404642	02/12/18 14:41	AGCM	TAL DEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 280-404556/1-A

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404556	02/11/18 19:22	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404643	02/12/18 16:02	AGCM	TAL DEN

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 280-404557/1-A

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404557	02/11/18 19:44	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404644	02/12/18 17:36	AGCM	TAL DEN

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 280-404582/1-A

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404582	02/12/18 08:23	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404879	02/13/18 12:26	AGCM	TAL DEN

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Client Sample ID: Method Blank

Date Collected: N/A Date Received: N/A Lab Sample ID: MB 280-404785/1-A

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:03	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: DLCK 280-404345/13

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8321A		1			404345	02/08/18 13:38	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 280-404518/2-A

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404518	02/09/18 20:54	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404641	02/12/18 13:45	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 280-404551/2-A

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 14:44	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 280-404556/2-A

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404556	02/11/18 19:22	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404643	02/12/18 16:05	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 280-4045:	57/2-A
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Matrix: Water

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404557	02/11/18 19:44	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404644	02/12/18 17:40	AGCM	TAL DEN

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 280-404582/2-A

Matrix: Water

Date Collected: N/A Date Received: N/A

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404582	02/12/18 08:23	НМА	TAL DEN
Total/NA	Analysis	8321A		1			404879	02/13/18 12:29	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 280-404785/2-A

Matrix: Water

Date Collected: N/A
Date Received: N/A

<del></del>	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:07	AGCM	TAL DEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 280-404518/3-A

Matrix: Water

Date Collected: N/A
Date Received: N/A

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404518	02/09/18 20:54	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404641	02/12/18 13:48	AGCM	TAL DEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 280-404551/4-A

Matrix: Water

Date Collected: N/A
Date Received: N/A

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 14:50	AGCM	TAL DEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 280-404556/3-A

Matrix: Water

Date Collected: N/A
Date Received: N/A

	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404556	02/11/18 19:22	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404643	02/12/18 16:08	AGCM	TAL DEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 280-404557/3-A

Matrix: Water

Date Collected: N/A
Date Received: N/A

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404557	02/11/18 19:44	CDC	TAL DEN
Total/NA	Δnalveis	8321Δ		1			404644	02/12/18 17:43	AGCM	TAL DEN

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling TestAmerica Job ID: 280-106036-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 280-404582/3-A

Date Collected: N/A Date Received: N/A Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404582	02/12/18 08:23	НМА	TAL DEN
Total/NA	Analysis	8321A		1			404879	02/13/18 12:32	AGCM	TAL DEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 280-404785/4-A

Matrix: Water

Date Collected: N/A Date Received: N/A

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:13	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LLCS 280-404518/4-A

Matrix: Water

Date Collected: N/A Date Received: N/A

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404518	02/09/18 20:54	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404641	02/12/18 13:52	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LLCS 280-404551/3-A

Matrix: Water

Date Collected: N/A Date Received: N/A

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 14:47	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LLCS 280-404556/4-A

Matrix: Water

Date Collected: N/A

Date Received: N/A

_	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404556	02/11/18 19:22	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404643	02/12/18 16:11	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LLCS 280-404557/4-A

Matrix: Water

Date Collected: N/A Date Received: N/A

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404557	02/11/18 19:44	CDC	TAL DEN
Total/NA	Analysis	8321 A		1			404644	02/12/18 17:46	AGCM	TAL DEN

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Client Sample ID: Lab Control Sample

Lab Sample ID: LLCS 280-404582/4-A

Matrix: Water

Date Collected: N/A Date Received: N/A

	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type Total/NA	Type Prep	Method 3535	Run	Factor	250 mL	Amount 5 mL	Number 404582	or Analyzed 02/12/18 08:23	Analyst HMA	TAL DEN
Total/NA	Analysis	8321A		1	230 IIIL	JIIL	404879	02/12/18 08:25		TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LLCS 280-404785/3-A

Matrix: Water

Date Collected: N/A Date Received: N/A

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:10	AGCM	TAL DEN

Client Sample ID: FAY-D-6476TABOR-W1-1-020118

Lab Sample ID: 280-106036-2 MS

Matrix: Water

Date Collected: 02/01/18 09:22 Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			284.8 mL	5 mL	404518	02/09/18 20:54	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404641	02/12/18 14:05	AGCM	TAL DEN

Client Sample ID: FAY-D-5049MATTH-W1-1-020118

Lab Sample ID: 280-106036-11 MS

Date Collected: 02/01/18 13:48 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			276.4 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:29	AGCM	TAL DEN

Client Sample ID: FAY-D-3322DANDE-W1-1-020118

Lab Sample ID: 280-106036-38 MS

Matrix: Water

Date Collected: 02/01/18 16:30 Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			300.2 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 09:02	AGCM	TAL DEN

Client Sample ID: FAY-D-6476TABOR-W1-1-020118

Lab Sample ID: 280-106036-2 DU

Matrix: Water

Date Collected: 02/01/18 09:22

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			270.4 mL	5 mL	404518	02/09/18 20:54	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404641	02/12/18 14:01	AGCM	TAL DEN

Client: Chemours Company FC, LLC The TestAmerica Job ID: 280-106036-1

Project/Site: FAY-2018 Residential Sampling

Client Sample ID: FAY-D-5049MATTH-W1-1-020118

Lab Sample ID: 280-106036-11 DU

Date Collected: 02/01/18 13:48 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			283.1 mL	5 mL	404551	02/11/18 11:55	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			404642	02/12/18 15:26	AGCM	TAL DEN

Client Sample ID: FAY-D-3322DANDE-W1-1-020118

Lab Sample ID: 280-106036-38 DU

Date Collected: 02/01/18 16:30 Matrix: Water

Date Received: 02/02/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			303.3 mL	5 mL	404785	02/13/18 11:30	DFB1	TAL DEN
Total/NA	Analysis	8321A		1			405022	02/14/18 08:59	AGCM	TAL DEN

#### Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

# **Accreditation/Certification Summary**

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

# Laboratory: TestAmerica Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	<b>Identification Number</b>	<b>Expiration Date</b>
North Carolina (VWV/SW)	State Prog	gram	4	358	12-31-18
The following analytes	are included in this repor	t, but accreditation/	certification is not off	ered by the governing auth	ority:
The following analytes a	are included in this repor Prep Method	rt, but accreditation/ Matrix	certification is not off Analyt	, , ,	ority:

# **Method Summary**

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Method	Method Description	Protocol	Laboratory
8321A	HFPO-DA	SW846	TAL DEN

#### **Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

# Sample Summary

Client: Chemours Company FC, LLC The Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-106036-1

Lab Sample ID	Client Sample ID	Matrix	Collected Received
280-106036-1	FAY-D-6377TABOR-W1-1-020118	Water	02/01/18 08:47 02/02/18 09:4
280-106036-2	FAY-D-6476TABOR-W1-1-020118	Water	02/01/18 09:22 02/02/18 09:4
280-106036-3	FAY-D-6476TABOR-W1-1-020118-D	Water	02/01/18 09:22 02/02/18 09:4
280-106036-4	FAY-D-6644TABOR-W1-1-020118	Water	02/01/18 09:56 02/02/18 09:4
280-106036-5	FAY-D-6644TABOR-W2-1-020118	Water	02/01/18 09:57 02/02/18 09:4
280-106036-6	FAY-D-6808TABOR-W1-1-020118	Water	02/01/18 10:45 02/02/18 09:4
280-106036-7	FAY-D-6838TABOR-W1-1-020118	Water	02/01/18 11:03 02/02/18 09:4
280-106036-8	FAY-D-6838TABOR-W2-1-020118	Water	02/01/18 11:04 02/02/18 09:4
280-106036-9	FAY-D-6858TABOR-W1-1-020118	Water	02/01/18 11:13 02/02/18 09:4
280-106036-10	FAY-D-7047TABOR-W1-1-020118	Water	02/01/18 11:51 02/02/18 09:4
280-106036-11	FAY-D-5049MATTH-W1-1-020118	Water	02/01/18 13:48 02/02/18 09:4
280-106036-12	FAY-D-7646TABOR-W1-1-02018	Water	02/01/18 14:55 02/02/18 09:4
280-106036-13	FAY-D-6731BUTLE-W1-1-020118	Water	02/01/18 08:24 02/02/18 09:4
280-106036-14	FAY-D-6731BUTLE-W1-2-020118	Water	02/01/18 08:26 02/02/18 09:4
280-106036-15	FAY-D-6815BUTLE-W1-1-020118	Water	02/01/18 08:53 02/02/18 09:4
280-106036-16	FAY-D-6893BUTLE-W1-1-020118	Water	02/01/18 09:44 02/02/18 09:4
280-106036-17	FAY-D-5018MRSHR-W1-1-020118	Water	02/01/18 11:13 02/02/18 09:4
280-106036-18	FAY-D-5018MRSHR-W1-2-020118	Water	02/01/18 11:13 02/02/18 09:4
280-106036-19	FAY-D-5021MRSHR-W1-1-020118	Water	02/01/18 11:44 02/02/18 09:4
280-106036-20	FAY-D-5021MRSHR-W1-2-020118	Water	02/01/18 11:48 02/02/18 09:4
280-106036-21	FAY-D-4065SPNSH-W1-1-020118	Water	02/01/18 13:51 02/02/18 09:4
280-106036-22	FAY-D-4065SPNSH-W1-2-020118	Water	02/01/18 13:55 02/02/18 09:4
280-106036-23	FAY-D-4057SPNSH-W1-1-020118	Water	02/01/18 14:34 02/02/18 09:4
280-106036-24	FAY-D-7265NC87H-W1-1-020118	Water	02/01/18 09:26 02/02/18 09:4
280-106036-25	FAY-D-7394NC87H-W1-1-020118	Water	02/01/18 10:42 02/02/18 09:4
280-106036-26	FAY-D-6711CHKFT-W1-1-020118	Water	02/01/18 11:52 02/02/18 09:4
280-106036-27	FAY-D-6416CHKFT-W1-1-020118	Water	02/01/18 12:04 02/02/18 09:4
280-106036-28	FAY-D-6591BUTLE-W1-1-020118	Water	02/01/18 14:38 02/02/18 09:4
280-106036-29	FAY-D-7149BUTLE-W1-1-020118	Water	02/01/18 15:03 02/02/18 09:4
280-106036-30	FAY-D-7243BUTLE-W1-1-020118	Water	02/01/18 17:11 02/02/18 09:4
280-106036-31	FAY-D-5049MATTH-W1-1-020118-D	Water	02/01/18 13:48 02/02/18 09:4
280-106036-32	FAY-D-7609TABOR-W1-1-020118	Water	02/01/18 14:41 02/02/18 09:4
280-106036-33	FAY-D-7741TABOR-W1-1-020118	Water	02/01/18 15:08 02/02/18 09:4
280-106036-34	FAY-D-FB-020118-B	Water	02/01/18 17:00 02/02/18 09:4
280-106036-35	FAY-D-47MAUDI-W1-1-020118	Water	02/01/18 09:00 02/02/18 09:4
280-106036-36	FAY-D-47MAUDI-W1-2-020118	Water	02/01/18 09:05 02/02/18 09:4
280-106036-37	FAY-D-1123NC20H-W1-1-020118	Water	02/01/18 09:43 02/02/18 09:4
280-106036-38	FAY-D-3322DANDE-W1-1-020118	Water	02/01/18 16:30 02/02/18 09:4
280-106036-39	FAY-D-3322DANDE-W1-1-020118D	Water	02/01/18 16:30 02/02/18 09:4
280-106036-39	FAY-D-4057SPNSH-W1-2-020118		02/01/18 14:35 02/02/18 09:4
280-106036-40	FAY-D-5085MRSHR-W1-1-020118	Water Water	02/01/18 14:33 02/02/18 09:4
		Water Water	
280-106036-42	FAY D EB 020118		02/01/18 07:55 02/02/18 09:4
280-106036-43	FAY-D-FB-020118-A	Water	02/01/18 13:00 02/02/18 09:4

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:
Instrument ID: LC\_LCMS7 Analysis Batch Number: 390728

Lab Sample ID: STD001 280-390728/3 IC Client Sample ID:

Date Analyzed: 10/10/17 09:35 Lab File ID: hfpo717J10026.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION	MANUAL INTEGRATION		
	TIME	REASON	ANALYST	DATE
HFPO-DA	0.89	Baseline	meyera	10/10/17 11:50

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Instrument ID: LC LCMS7 Analysis Batch Number: 404345

Lab Sample ID: STD001 280-404345/3 IC Client Sample ID:

Date Analyzed: 02/08/18 13:05 Lab File ID: hfpo718B08034.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION	MANUAL INTEGRATION		
	TIME	REASON	ANALYST	DATE
HFPO-DA	1.06	Assign Peak	meyera	02/08/18 15:19

Lab Sample ID: STD002 280-404345/4 IC Client Sample ID:

Date Analyzed: 02/08/18 13:08 Lab File ID: hfpo718B08035.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION	MANUAL INTEGRATION		
	TIME	REASON	ANALYST	DATE
HFPO-DA	1.06	Baseline	meyera	02/08/18 15:19

Lab Sample ID: DLCK 280-404345/13 Client Sample ID:

Date Analyzed: 02/08/18 13:38 Lab File ID: hfpo718B08044.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION	MANUAL INTEGRATION		
	TIME	REASON	ANALYST	DATE
HFPO-DA	1.06	Baseline	meyera	02/08/18 15:20

Lab Name: TestAmerica Denver

SDG No.:

Instrument ID: LC\_LCMS7

Analysis Batch Number: 404641

Lab Sample ID: 280-106036-1 Client Sample ID: FAY-D-6377TABOR-W1-1-020118

Date Analyzed: 02/12/18 13:55 Lab File ID: hfpo718B12068.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION	MANUAL INTEGRATION		
	TIME	REASON	ANALYST	DATE
HFPO-DA	0.92	Baseline	meyera	02/12/18 14:30

Lab Name: TestAmerica Denver

SDG No.:

Instrument ID: LC\_LCMS7

Analysis Batch Number: 404642

Lab Sample ID: <u>280-106036-5</u> Client Sample ID: <u>FAY-D-6644TABOR-W2-1-020118</u>

Date Analyzed: 02/12/18 15:03 Lab File ID: hfpo718B12089.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION	MANUAL INTEGRATION		
	TIME	REASON	ANALYST	DATE
HFPO-DA	0.99	Baseline	meyera	02/13/18 07:47

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Instrument ID: LC\_LCMS7 Analysis Batch Number: 404643

Lab Sample ID: LLCS 280-404556/4-A Client Sample ID:

Date Analyzed: 02/12/18 16:11 Lab File ID: hfpo718B12110.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION	MANUAL INTEGRATION		
	TIME	REASON	ANALYST	DATE
HFPO-DA	0.92	Baseline	meyera	02/13/18 07:49

Lab Sample ID: 280-106036-19 Client Sample ID: FAY-D-5021MRSHR-W1-1-020118

Date Analyzed: 02/12/18 16:15 Lab File ID: hfpo718B12111.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION	MANUAL INTEGRATION		
	TIME	REASON	ANALYST	DATE
HFPO-DA	0.93	Baseline	meyera	02/13/18 07:49

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:
Instrument ID: LC\_LCMS7 Analysis Batch Number: 404644

Lab Sample ID: 280-106036-24 Client Sample ID: FAY-D-7265NC87H-W1-1-020118

Date Analyzed: 02/12/18 17:53 Lab File ID: hfpo718B12141.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION	MANUAL INTEGRATION		
	TIME	REASON	ANALYST	DATE
HFPO-DA	0.92	Baseline	meyera	02/13/18 07:52

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
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				Reagent	Parent Reage	nt		
	Exp	Prep	Dilutant	Final		Volume		
Reagent ID	Date	Date	Used	Volume	Reagent ID	Added	Analyte	Concentration
HFPO I.S00007	12/12/18	12/12/17	LCMS Grade MeOH, Lot LCMS MeOH 00110	100 mL	13C3 HFPO-DA_00007	1 mL	13C3 HFPO-DA	0.5 ug/mL
						13C3 HFPO-DA (IS)	0.5 ug/mL	
.13C3 HFPO-DA_00007	08/17/20	We	ellington Laboratories, : M3HFPOADA0817	Lot	(Purchased Reag	rent)	13C3 HFPO-DA	50 ug/mL
							13C3 HFPO-DA (IS)	50 ug/mL
HFPO I.S00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL
.13C3 HFPO-DA_00008	01/30/19	We	ellington Laboratories, : M3HFPOADA0817	Lot	(Purchased Reag	(ent)	13C3 HFPO-DA	50 ug/mL
		<u></u>					13C3 HFPO-DA (IS)	50 ug/mL
HFPO Spike_00004			LCMS Grade MeOH, Lot LCMS MeOH 00110		HFPO-DA_00004		HFPO-DA	0.5 ug/mL
.HFPO-DA_00004	07/13/20	Welling	ton Laboratories, Lot HF	PODA0717	(Purchased Reag	(ent)	HFPO-DA	50 ug/mL
HFPO_CAL-1_00031	10/24/17	10/10/17	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00004	20 uL	13C3 HFPO-DA	10 ug/L
						13C3 HFPO-DA (IS)	10 ug/L	
WEDD T 6 00004	00/00/10	00/00/17	T GMG G I M GW T	100 7	HFPO Spike_00003		HFPO-DA	0.25 ug/L
.HFPO I.S00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
1202 WEDO DE 00001	00/00/10	T-7		r .	(D ) 1 D	1.	13C3 HFPO-DA (IS)	0.5 ug/mL
13C3 HFPO-DA_00004	08/28/18	Me	Wellington Laboratories, Lot M3HFFOADA0616		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.HFPO Spike 00003	01/11/10	01/10/17	LCMS Grade MeOH, Lot	1.00 mT	HFPO-DA 00003	1 mT	13C3 HFPO-DA (IS) HFPO-DA	50 ug/mL 0.5 ug/mL
.nrro spike_00003			LCMS MeOH 00110					0.5 ug/mii
HFPO-DA_00003	12/16/18	Welling	ton Laboratories, Lot HE	PODA0213	(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-1_00032	02/22/18	02/08/18	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00008	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L
	40/40/40	04 400 440		100	HFPO Spike 00004		HFPO-DA	0.25 ug/L
.HFPO I.S00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA 00008	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL
13C3 HFPO-DA_00008	01/30/19	Me	ellington Laboratories, : M3HFPOADA0817	Lot	(Purchased Reag	rent)	13C3 HFPO-DA	50 ug/mL
							13C3 HFPO-DA (IS)	50 ug/mL
.HFPO Spike_00004			LCMS Grade MeOH, Lot LCMS MeOH 00110		HFPO-DA_00004		HFPO-DA	0.5 ug/mL
HFPO-DA_00004	07/13/20		ton Laboratories, Lot HF		(Purchased Reag		HFPO-DA	50 ug/mL
HFPO_CAL-2_00032	10/24/17	10/10/17	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00004	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L
HEDO T G OCCO	00/00/10	00/00/17	Torra a la Maria	100 -	HFPO Spike_00003		HFPO-DA	0.5 ug/L
.HFPO I.S00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA 00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
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				Reagent	Parent Reage	nt		
	Exp	Prep	Dilutant	Final		Volume	-	
Reagent ID	Date	Date	Used	Volume	Reagent ID	Added	Analyte	Concentration
13C3 HFPO-DA_00004	08/28/18	We	Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reac	(Purchased Reagent)		50 ug/mL
							13C3 HFPO-DA (IS)	50 ug/mL
.HFPO Spike_00003	01/11/18		LCMS Grade MeOH, Lot LCMS MeOH 00110		HFPO-DA_00003		HFPO-DA	0.5 ug/mL
HFPO-DA_00003	12/16/18	Welling	ton Laboratories, Lot HE	PODA0213	(Purchased Read	gent)	HFPO-DA	50 ug/mL
HFPO_CAL-2_00033	02/22/18	02/08/18	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00008	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L
					HFPO Spike_00004		HFPO-DA	0.5 ug/L
.HFPO I.S00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL
1000 1170 07 0000	01 (00 (10				(5)		13C3 HFPO-DA (IS)	0.5 ug/mL
13C3 HFPO-DA_00008	01/30/19	₩€	ellington Laboratories, : M3HFPOADA0817	Lot	(Purchased Reac	gent)	13C3 HFPO-DA	50 ug/mL
77777 7 11 00001	10/00/10	10/00/17	Trong of the North Tri	100 -			13C3 HFPO-DA (IS)	50 ug/mL
.HFPO Spike_00004			LCMS Grade MeOH, Lot LCMS MeOH 00110		HFPO-DA_00004		HFPO-DA	0.5 ug/mL
HFPO-DA_00004	07/13/20	Welling	ton Laboratories, Lot HF	PODA0717	(Purchased Read	gent)	HFPO-DA	50 ug/mL
HFPO_CAL-3_00031	10/24/17	10/10/17	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00004	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L
					HFPO Spike_00003		HFPO-DA	1 ug/L
.HFPO I.S00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL
13C3 HFPO-DA_00004	08/28/18	₩€	ellington Laboratories, : M3HFPOADA0616	Lot	(Purchased Reac	gent)	13C3 HFPO-DA	50 ug/mL
HEDO G 11 00000	01/11/10	01/10/17	T CIMC Consider Manager T at	100 -	HERO DE COCOS	1 T	13C3 HFPO-DA (IS)	50 ug/mL
.HFPO Spike_00003			LCMS Grade MeOH, Lot LCMS MeOH 00110		HFPO-DA_00003		HFPO-DA	0.5 ug/mL
HFPO-DA_00003	12/16/18	Welling	ton Laboratories, Lot HE				HFPO-DA	50 ug/mL
HFPO_CAL-3_00032	02/22/18	02/08/18	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00008	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L
					HFPO Spike_00004		HFPO-DA	1 ug/L
.HFPO I.S00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS MeOH 00110	100 mL	13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL
1000 4550 57 0000	01/02/10				(17)		13C3 HFPO-DA (IS)	0.5 ug/mL
13C3 HFPO-DA_00008	01/30/19	We	ellington Laboratories, : M3HFPOADA0817	Lot	(Purchased Reac	jent)	13C3 HFPO-DA	50 ug/mL
HEDO Coiko 00004	10/20/10	10/20/17	I CMC Cyado Magui Tat	100	HFPO-DA 00004	1 m-T	13C3 HFPO-DA (IS) HFPO-DA	50 ug/mL
.HFPO Spike_00004			LCMS Grade MeOH, Lot LCMS MeOH 00110		_			0.5 ug/mL
HFPO-DA_00004			ton Laboratories, Lot HF		(Purchased Reac	·	HFPO-DA	50 ug/mL
HFPO_CAL-4_00031	10/24/17	10/10/17	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00004	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
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			Posgont	Parent Reage	nt		
Evn	Pren	Dilutant			Volume		
				Reagent ID		Analyte	Concentration
2000	2000	0.00	7 5 12 58.415 57	_			2 ug/L
08/28/18	08/28/17	LCMS Grade MeOH Lot	1.00 mT.	13C3 HEPO-DA 00004			0.5 ug/mL
00/20/10	00/20/1/	LCMS MeOH 00110	100 1111	I SOS III O DA_00004	1 11111	1303 HELO DA	0.3 dg/mi
						13C3 HFPO-DA (IS)	0.5 ug/mL
08/28/18	We	ellington Laboratories, M3HFPOADA0616	Lot	(Purchased Reag	ent)	13C3 HFPO-DA	50 ug/mL
							50 ug/mL
		LCMS MeOH 00110		_			0.5 ug/mL
12/16/18	Welling	ton Laboratories, Lot H					50 ug/mL
02/22/18	02/08/18	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00008	20 uL		10 ug/L
							10 ug/L
				HFPO Spike 00004			2 ug/L
12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL		0.5 ug/mL
						13C3 HFPO-DA (IS)	0.5 ug/mL
01/30/19	We	ellington Laboratories, M3HFPOADA0817	Lot	(Purchased Reag	ent)		50 ug/mL
						13C3 HFPO-DA (IS)	50 ug/mL
		LCMS MeOH 00110		_			0.5 ug/mL
07/13/20	Welling	ton Laboratories, Lot H	IFPODA0717	(Purchased Reag	rent)	HFPO-DA	50 ug/mL
10/24/17	10/10/17	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00004	20 uL	13C3 HFPO-DA	10 ug/L
						13C3 HFPO-DA (IS)	10 ug/L
				HFPO Spike_00003			5 ug/L
08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL		0.5 ug/mL
							0.5 ug/mL
08/28/18	W e	ellington Laboratories, M3HFPOADA0616	Lot	(Purchased Reag	rent)		50 ug/mL
						13C3 HFPO-DA (IS)	50 ug/mL
		LCMS MeOH 00110					0.5 ug/mL
							50 ug/mL
02/22/18	02/08/18	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00008	20 uL		10 ug/L
						13C3 HFPO-DA (IS)	10 ug/L
				HFPO Spike_00004	10 uL	HFPO-DA	5 ug/L
12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL		0.5 ug/mL
						13C3 HFPO-DA (IS)	0.5 ug/mL
01/30/19	₩€	ellington Laboratories, M3HFPOADA0817	Lot	Purchased Reag	ent)		50 ug/mL
						13C3 HFPO-DA (IS)	50 ug/mL
		LCMS MeOH 00110		HFPO-DA_00004 (Purchased Reag		HFPO-DA HFPO-DA	0.5 ug/mL 50 ug/mL
	08/28/18  01/11/18  12/16/18  02/22/18  12/12/18  01/30/19  10/30/19  08/28/18  01/11/18  12/16/18  02/22/18  12/12/18	Date Date  08/28/18 08/28/17  08/28/18 08/28/17  01/11/18 01/10/17  12/16/18 Welling  02/22/18 02/08/18  12/12/18 01/30/18  01/30/19 Welling  10/30/18 10/30/17  07/13/20 Welling  10/24/17 10/10/17  08/28/18 08/28/17  08/28/18 Welling  01/11/18 01/10/17  12/16/18 Welling  02/22/18 02/08/18  12/12/18 01/30/18	Date   Date   Used	Date   Date   Used   Volume	Exp	Exp   Date   Date   Date   Used   Final   Reagent ID   Added	Exp   Date   Dilutant   Final   Volume   Added   Analyte

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
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				Reagent	Parent Reager	nt		
	Exp	Prep	Dilutant	Final		Volume		
Reagent ID	Date	Date	Used	Volume	Reagent ID	Added	Analyte	Concentration
HFPO_CAL-6_00070	10/24/17		:20 Methanol : H2O, t 00016	1 mL	HFPO I.S00004	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L
					HFPO Spike_00003		HFPO-DA	10 ug/L
.HFPO I.S00004	08/28/18		MS Grade MeOH, Lot MS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL
13C3 HFPO-DA_00004	08/28/18	Welli	ngton Laboratories, M3HFPOADA0616	Lot	(Purchased Reag	ent)	13C3 HFPO-DA	50 ug/mL
.HFPO Spike 00003	01/11/10	01/10/17 10	MS Grade MeOH, Lot	1.00 1	HFPO-DA 00003	1 T	13C3 HFPO-DA (IS) HFPO-DA	50 ug/mL 0.5 ug/mL
		LC	MS MeOH 00110					
HFPO-DA_00003	12/16/18	Wellington	Laboratories, Lot H	FPODA0213	(Purchased Reag	ent)	HFPO-DA	50 ug/mL
HFPO_CAL-6_00080	02/22/18		:20 Methanol : H2O, t 00016	1 mL	HFPO I.S00008	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L
					HFPO Spike_00004		HFPO-DA	10 ug/L
.HFPO I.S00008	12/12/18		MS Grade MeOH, Lot MS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL
13C3 HFPO-DA_00008	01/30/19	Welli	ngton Laboratories, M3HFPOADA0817	Lot	(Purchased Reag	ent)	13C3 HFPO-DA	50 ug/mL
							13C3 HFPO-DA (IS)	50 ug/mL
.HFPO Spike_00004		LC	MS Grade MeOH, Lot MS MeOH 00110		HFPO-DA_00004		HFPO-DA	0.5 ug/mL
HFPO-DA_00004	07/13/20	Wellington	Laboratories, Lot H	FPODA0717	(Purchased Reag	ent)	HFPO-DA	50 ug/mL
HFPO_CAL-7_00031	10/24/17		:20 Methanol : H2O, t 00016	1 mL	HFPO I.S00004	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L
					HFPO Spike_00003		HFPO-DA	25 ug/L
.HFPO I.S00004	08/28/18		MS Grade MeOH, Lot MS MeOH 00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL
13C3 HFPO-DA_00004	08/28/18	Welli	ngton Laboratories, M3HFPOADA0616	Lot	(Purchased Reag	ent)	13C3 HFPO-DA	50 ug/mL
							13C3 HFPO-DA (IS)	50 ug/mL
.HFPO Spike_00003		LC	MS Grade MeOH, Lot MS MeOH 00110		HFPO-DA_00003		HFPO-DA	0.5 ug/mL
HFPO-DA_00003	12/16/18	Wellington	Laboratories, Lot H		(Purchased Reag	ent)	HFPO-DA	50 ug/mL
HFPO_CAL-7_00032	02/22/18		:20 Methanol : H2O, t 00016	1 mL	HFPO I.S00008	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L
					HFPO Spike_00004		HFPO-DA	25 ug/L
.HFPO I.S00008	12/12/18		MS Grade MeOH, Lot MS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL
13C3 HFPO-DA_00008	01/30/19	Welli	ngton Laboratories, M3HFPOADA0817	Lot	(Purchased Reag	ent)	13C3 HFPO-DA	50 ug/mL

Lab Name: TestAmerica Denver Job No.: 280-106036-1
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				Reagent	Parent Reager	nt		
	Exp	Prep	Dilutant	Final		Volume		
Reagent ID	Date	Date	Used	Volume	Reagent ID	Added	Analyte	Concentration
			<u> </u>				13C3 HFPO-DA (IS)	50 ug/mL
.HFPO Spike_00004			LCMS Grade MeOH, Lot LCMS_MeOH_00110		HFPO-DA_00004		HFPO-DA	0.5 ug/mL
HFPO-DA_00004	07/13/20	Welling	ton Laboratories, Lot HE		(Purchased Reag		HFPO-DA	50 ug/mL
HFPO_CAL-8_00031	10/24/17	10/10/17	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00004	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L
					HFPO Spike 00003	100 uL	HFPO-DA	50 ug/L
.HFPO I.S00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS MeOH 00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
1262 HERO DT 00001	00/00/10	F.7	17	r	(D)		13C3 HFPO-DA (IS)	0.5 ug/mL
13C3 HFPO-DA_00004	08/28/18	₩€	ellington Laboratories, : M3HFPOADA0616	Lot	(Purchased Reag	ent)	13C3 HFPO-DA	50 ug/mL
HEDO Cribe 00003	01/11/10	01/10/17	LCMS Grade MeOH, Lot	1.00	HFPO-DA 00003	1 no T	13C3 HFPO-DA (IS) HFPO-DA	50 ug/mL
.HFPO Spike_00003			LCMS MeOH 00110		_			0.5 ug/mL
HFPO-DA_00003	12/16/18	Welling	ton Laboratories, Lot HF		(Purchased Reag		HFPO-DA	50 ug/mL
HFPO_CAL-8_00032	02/22/18	02/08/18	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00008	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L
					HFPO Spike 00004	100 uL	HFPO-DA	50 ug/L
.HFPO I.S00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS MeOH 00110	100 mL	13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL
13C3 HFPO-DA_00008	01/30/19	₩€	Wellington Laboratories, Lot M3HFPOADA0817		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
	10/20/10	10/00/17	T CNG G I N OU T	100 1	HEDO DE COCCA	1 T	13C3 HFPO-DA (IS)	50 ug/mL
.HFPO Spike_00004			LCMS Grade MeOH, Lot LCMS MeOH 00110		HFPO-DA_00004		HFPO-DA	0.5 ug/mL
HFPO-DA_00004			ton Laboratories, Lot HF		(Purchased Reag	ent)	HFPO-DA	50 ug/mL
HFPO_CAL-9_00001	02/22/18	02/08/18	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00008	20 uL	13C3 HFPO-DA	10 ug/L
							13C3 HFPO-DA (IS)	10 ug/L
					HFPO Spike 00004		HFPO-DA	100 ug/L
.HFPO I.S00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL
13C3 HFPO-DA_00008	01/30/19	W€	ellington Laboratories, : M3HFPOADA0817	Lot	(Purchased Reag	ent)	13C3 HFPO-DA	50 ug/mL
	10/00/11	100000		1.00			13C3 HFPO-DA (IS)	50 ug/mL
.HFPO Spike_00004			LCMS Grade MeOH, Lot LCMS MeOH 00110		HFPO-DA_00004		HFPO-DA	0.5 ug/mL
HFPO-DA_00004	07/13/20	Welling	ton Laboratories, Lot HF		(Purchased Reag		HFPO-DA	50 ug/mL
HFPO_ICV_00032	10/24/17	10/10/17	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike_00003		HFPO-DA	2 ug/L
.HFPO I.S00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL

Lab	Name:	TestAmerica	Denver	Job No.: 28	80-106036-1
SDG	No.:				

				Reagent	Parent Reage	nt		
Reagent ID	Exp Date	Prep Date	Dilutant Used	Final Volume	Reagent ID	Volume Added	Analyte	Concentration
13C3 HFPO-DA_00004	08/28/18	Well	lington Laboratories, M3HFPOADA0616	Lot	(Purchased Read	gent)	13C3 HFPO-DA	50 ug/mL
.HFPO Spike_00003	01/11/18		CMS Grade MeOH, Lot CMS MeOH 00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	0.5 ug/mL
HFPO-DA_00003	12/16/18	Wellingto	n Laboratories, Lot	HFPODA0213	(Purchased Read	gent)	HFPO-DA	50 ug/mL

# Reagent

# 13C3 HFPO-DA\_00004



# CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

M3HFPO-DA

LOT NUMBER:

M3HFPODA0616

COMPOUND:

2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-13C,-propanoic acid

STRUCTURE:

CAS #:

Not available

**MOLECULAR FORMULA:** 

CONCENTRATION:

 $^{13}C_3^{12}C_3HF_{11}O_3$ 50 ± 2.5 µg/ml

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

06/25/2016

EXPIRY DATE: (mm/cd/yyyy)

06/25/2019

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

**MOLECULAR WEIGHT:** 

<u>HT:</u> 333.03

SOLVENT(S):

Methanol ≥99% ¹³C

ISOTOPIC PURITY:

(13C<sub>3</sub>)

#### **DOCUMENTATION/ DATA ATTACHED:**

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

#### **ADDITIONAL INFORMATION:**

See page 2 for further details.

Contains ~ 1.5% of two constitutional isomers.

Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B G Phillim

Date:

<u>6/29/2010</u>

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

#### INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

#### **HAZARDS**:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and sultable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

#### **SYNTHESIS / CHARACTERIZATION:**

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

#### HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

#### **UNCERTAINTY:**

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty,  $u_i(y)$ , of a value y and the uncertainty of the independent parameters

 $x_1, x_2,...x_n$  on which it depends is:

$$u_e(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of  $\pm 5\%$  (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

#### TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

#### **EXPIRY DATE / PERIOD OF VALIDITY:**

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

#### LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

### QUALITY MANAGEMENT:

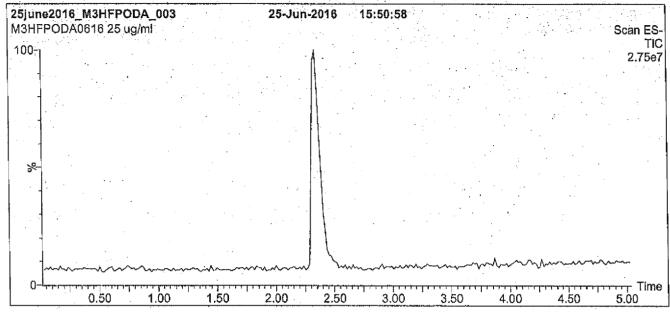
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

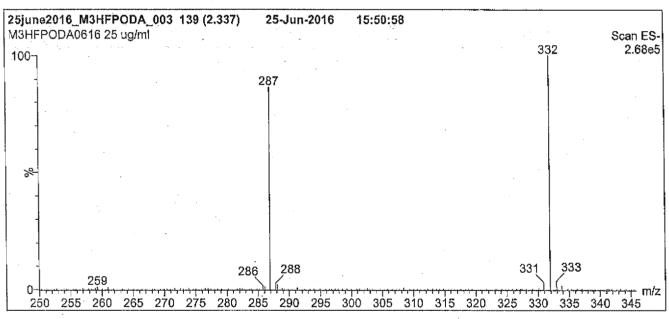




\*\*For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at <a href="https://www.well-labs.com">www.well-labs.com</a> or contact us directly at <a href="mailto:linearing-info@well-labs.com">line@well-labs.com</a>\*\*

Figure 1: M3HFPO-DA; LC/MS Data (TIC and Mass Spectrum)





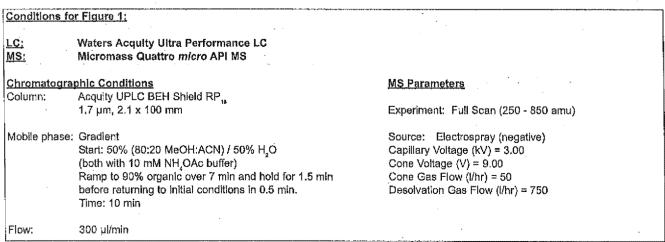
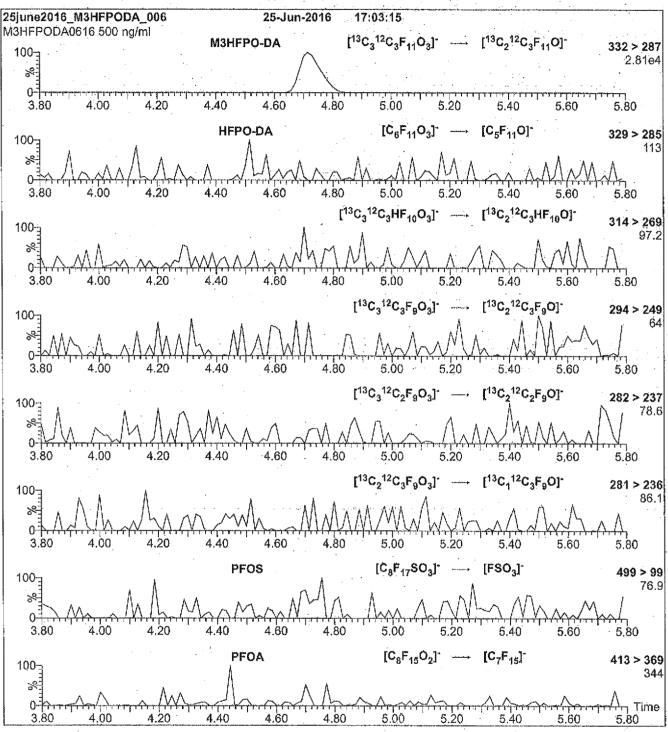
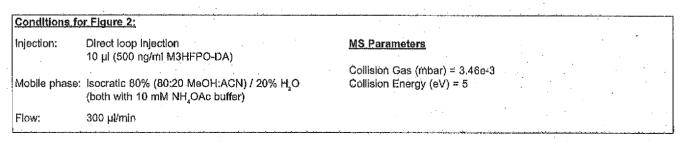


Figure 2: M3HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)





# 13C3 HFPO-DA\_00007



### CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

M3HFPO-DA

LOT NUMBER:

M3HFPODA0817

COMPOUND:

2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-13C,-propanoic acid

STRUCTURE:

CAS #:

Not available

MOLECULAR FORMULA:

<sup>13</sup>C<sub>2</sub><sup>12</sup>C<sub>2</sub>HF<sub>4</sub>O<sub>2</sub>

MOLECULAR WEIGHT:

333.03

CONCENTRATION:

 $50 \pm 2.5 \, \mu g/ml$ 

SOLVENT(S):

Methanol

**CHEMICAL PURITY:** 

>98%

ISOTOPIC PURITY:

>99% 13C

(13C<sub>3</sub>)

LAST TESTED: (mm/ed/yyyy)

08/17/2017

EXPIRY DATE: (mm/dc/yyyy)

08/17/2020

**RECOMMENDED STORAGE:** 

Store ampoule in a cool, dark place

#### DOCUMENTATION/DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2; LC/MS/MS Data (Selected MRM Transitions)

#### ADDITIONAL INFORMATION:

See page 2 for further details.

Contains ~ 1.5% of two constitutional isomers.

Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim, General Manager

Date: 08/25/2017

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA 519-822-2436 • Fax: 519-822-2849 • Info@well-labs.com

#### INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certifled reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

#### **HAZARDS:**

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

#### SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

#### HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

#### **UNCERTAINTY:**

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, u(y), of a value y and the uncertainty of the independent parameters

$$x_i, x_2, ...x_n$$
 on which it depends is: 
$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^n u(y_i, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the Individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

#### TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international international standard standa

#### **EXPIRY DATE / PERIOD OF VALIDITY:**

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

#### LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

#### **QUALITY MANAGEMENT:**

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

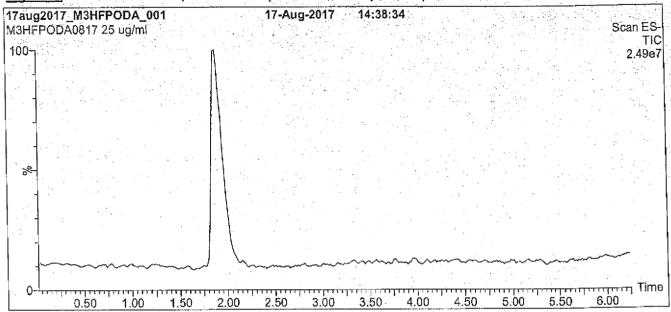


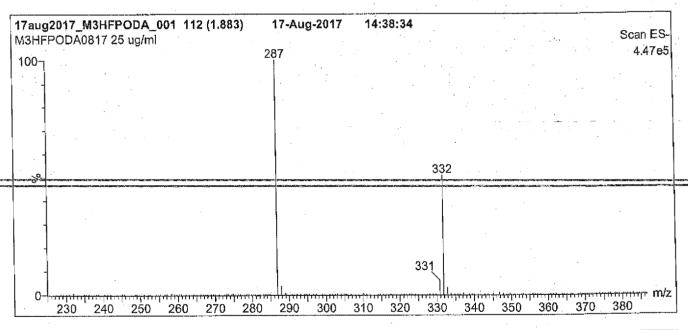


\*\*For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at <a href="www.well-labs.com">www.well-labs.com</a> or contact us directly at <a href="mailto:info@well-labs.com">info@well-labs.com</a>\*\*

Form#27, lasued 2004-11-10 Revision#:4, Revised 2017-03-06 M3HFPODA0817 (2 of 4)







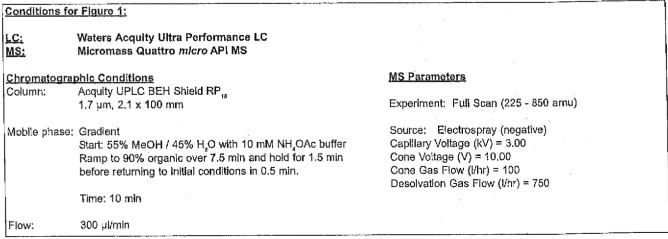
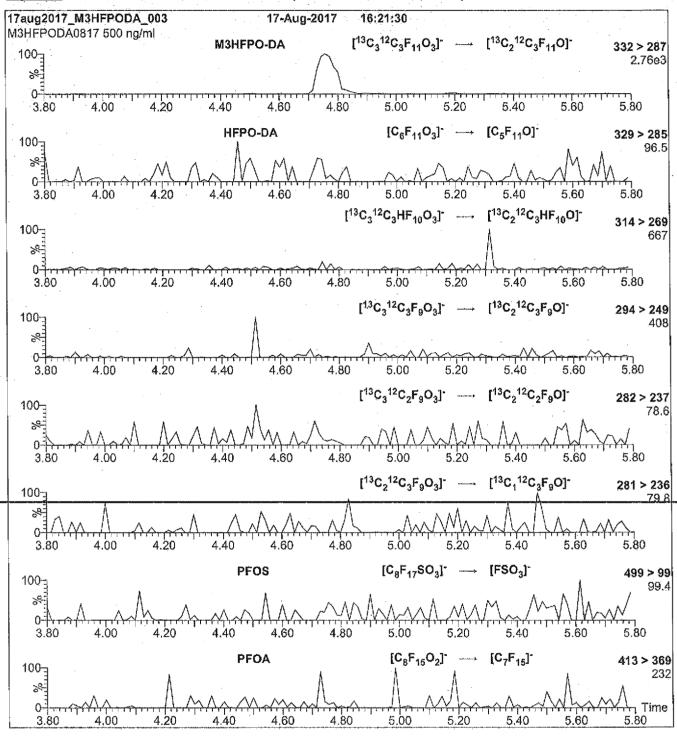
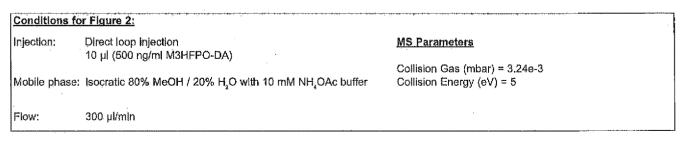


Figure 2: M3HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)





# 13C3 HFPO-DA\_00008



### CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

M3HFPO-DA

LOT NUMBER:

M3HFPODA0817

COMPOUND:

2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-13C,-propanoic acid

STRUCTURE:

CAS #:

Not available

**MOLECULAR FORMULA:** 

<sup>13</sup>C<sub>2</sub><sup>12</sup>C<sub>2</sub>HF<sub>4</sub>O<sub>2</sub>

MOLECULAR WEIGHT:

333.03

CONCENTRATION:

 $50 \pm 2.5 \, \mu g/ml$ 

SOLVENT(S):

Methanol

**CHEMICAL PURITY:** 

>98%

ISOTOPIC PURITY:

>99% 13C

(13C<sub>3</sub>)

LAST TESTED: (mm/ed/yyyy)

08/17/2017

EXPIRY DATE: (mm/dc/yyyy)

08/17/2020

**RECOMMENDED STORAGE:** 

Store ampoule in a cool, dark place

#### DOCUMENTATION/DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2; LC/MS/MS Data (Selected MRM Transitions)

#### ADDITIONAL INFORMATION:

See page 2 for further details.

Contains ~ 1.5% of two constitutional isomers.

Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim, General Manager

Date: 08/25/2017

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA 519-822-2436 • Fax: 519-822-2849 • Info@well-labs.com

#### INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

#### **HAZARDS:**

This product should only be used by qualified personnel familiar with its potential nazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

#### SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

#### HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

#### **UNCERTAINTY:**

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty,  $u_{c}(y)$ , of a value y and the uncertainty of the independent parameters

$$x_i, x_2, ...x_n$$
 on which it depends is: 
$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^n u(y_i, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the Individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

#### TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international international standard standa

#### **EXPIRY DATE / PERIOD OF VALIDITY:**

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

#### LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

#### **QUALITY MANAGEMENT:**

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

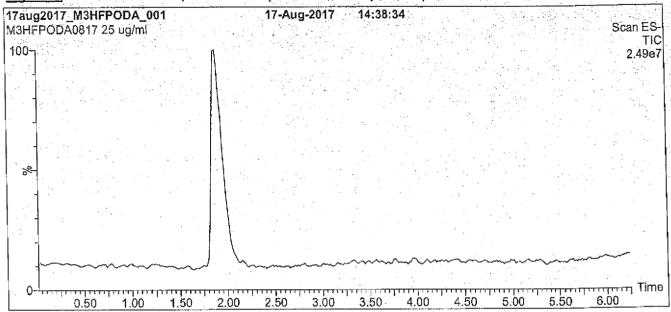


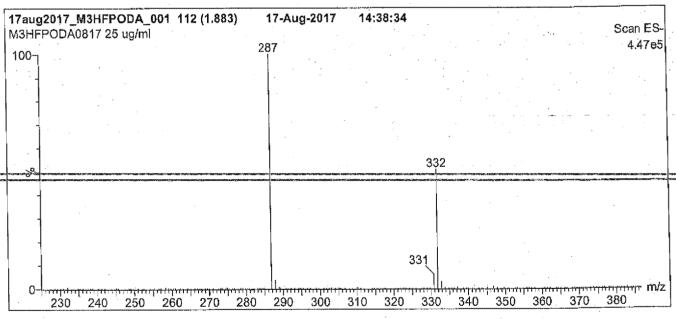


\*\*For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at <a href="www.well-labs.com">www.well-labs.com</a> or contact us directly at <a href="mailto:info@well-labs.com">info@well-labs.com</a>\*\*

Form#27, lasued 2004-11-10 Revision#:4, Revised 2017-03-06







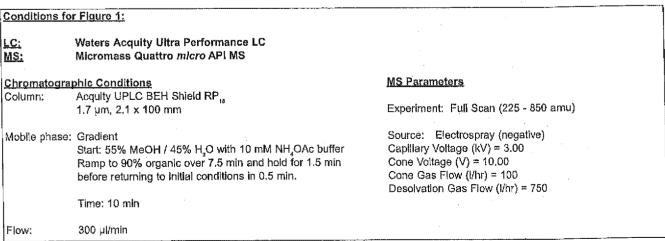
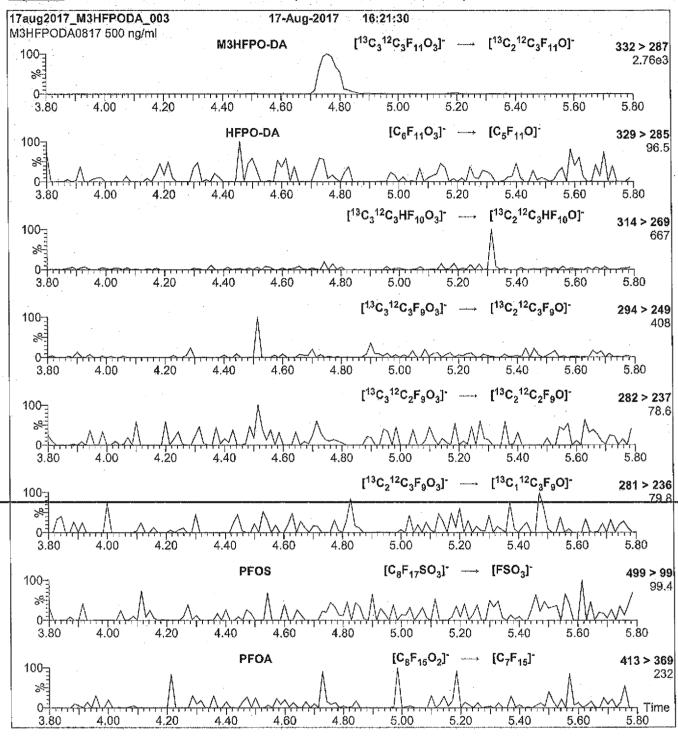
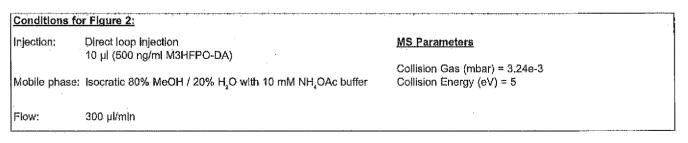


Figure 2: M3HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)





HFPO I.S.\_00004





Reagent ID:

HFPO LS.\_00004

Description:

Internal Standard for HFPO 0.5ug/ml

No. of Bottles:

Storage Location: Reagent Volume: 100.000 mL

Creation Date:

Open Date: Container(s): Comment:

North Analytical 08/28/2017

4702620

Expiration Date: Laboratory:

Prepared By: Solvent

Solvent Let:

08/28/2018

0/2 Kara/17

TestAmerica Denver Meyer, Andrew GC LCMS Grade MeOH LCMS\_MeOH\_00110

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	- Source Conc.	Source Conc. Units	Final - Conc.	Conc. Units
13C3 HFPO-DA	13C3 HFPO-DA_00004	08/28/2018	50.00000	ug/mL	0.50000	ug/mL
13C3 HFPO-DA (IS)	13C3 HFPO-DA_00004	08/28/2018	50.00000	ug/mL	0.50000	ug/mL

Source Responts

Reagent	Description	Type	Expiration	Vendor	Vendor Lot#	Vendor Cat Lot #	Volum <del>e</del> Used	Volum Units
13C3 HEPO-DA 00004	13C3 HFPO-DA I.S. for	ASTD	08/28/18		ratoriesM3HFPOADA06	16M3HFPO-DA	1.00000	mL

08/29/2017 10:46

itaset:

Untitled

st Altered:

Tuesday, August 29, 2017 10:47:21 Mountain Daylight Time

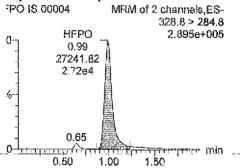
nted:

Tuesday, August 29, 2017 10:47:53 Mountain Daylight Time

ethod: C:\MassLynx\8321.PRO\MethDB\hfpo.mdb 23 Aug 2017 10:19:52

libration: C:\MassLynx\8321.PRO\CurveDB\hfpo17d24.cdb 24 Apr 2017 13:20:17





[18] The second	Std. Conc	RT.	Area	IS Area	Response f	rimar	ppb:	%Dev
1 hfpo717H23083	10.000	0.99	27241.822	28795.438	0.946	bd	10.0	-0.4

itaset:

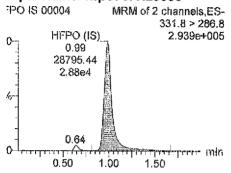
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st Altered:

Tuesday, August 29, 2017 10:47:21 Mountain Daylight Time Tuesday, August 29, 2017 10:47:53 Mountain Daylight Time

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#### mple Name: hfpo717H23083



# Name : Type : Type : Type : St	d Cane	RT	Aiea	S Areas as Responsed Primary	oob %De	(i
Page 12 february 2018 at 1 and 1 and 2		. LOS OR DEPLACE APPROPRIES.	and the second s	AND A CONTROL OF THE PARTY OF T		
1 hfpo717H23083	1.000	0.99	28795.438	28795,438 bb	1.2 23.6	6

HFPO I.S.\_00007

Report Date: 12-Dec-2017 15:48:45 Chrom Revision: 2.2 08-Dec-2017 11:41:26

#### Preliminary Report

TestAmerica Denver Internal Standard Recovery Report

Data File:

\\ChromNA\Denver\ChromData\LC LCMS7\20171212-65681.b\hfpo717L12074.d

Lims ID:

HFPO IS 00007

Client ID:

Sample Type: CCV

Inject. Date:

12-Dec-2017 15:02:32

ALS Bottle#: Dil. Factor:

25

1.0000

Worklist Smp#:

74

Injection Vol: Sample Info: 20.0 ul

HFPO IS 00007

Misc. Info.:

HFPO17L12

Operator ID:

**JBH** 

Instrument ID:

LC\_LCMS7

Sublist:

chrom-HFPO\*sub1

Method:

\\ChromNA\Denver\ChromData\LC\_LCMS7\20171212-65681.b\HFPO.m

Limit Group: Last Update: LC - 8321A HFPO Du 12-Dec-2017 15:48:38

Callb Date:

10-Oct-2017 09:58:07

Integrator:

Picker

Quant Method:

Internal/External Standard

Quant By:

Initial Calibration

Last ICal File:

\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1:

Det: F1:MRM

Process Host:

XAWRK024

#### Averaged ICal Samples:

\\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10026.d \\ChromNA\Denver\ChromData\LC LCMS7\20171010-63483.b\hfpo717J10027.d \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10028.d \ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10029.d \\ChromNA\Denver\ChromData\LC LCMS7\20171010-63483.b\hfpo717J10030.d \\ChromNA\Denver\ChromData\LC LCMS7\20171010-63483.b\hfpo717J10031.d \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10032.d \ChromNA\Denver\ChromData\LC LCMS7\20171010-63483.b\hfpo717J10033,d

Area Recoveries, Detector: F1:MRM

Compound	Average Standard	Lower Limit	Upper Limit	Sample	% Rec
* 2 13C3 HFPO-DA (IS)	731446	365723	1462892	740105	101.18

#### RT Recoveries

Compound	Average Standard	Lower Limit	Upper Limit	Sample	DLT(min.)	% Diff
* 2 13C3 HFPO-DA (IS)	0.880	0.380	1.380	1.056	-0.176	19.997

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.500 minutes of internal standard RT.

RT LOWER LIMIT = - 0.500 minutes of internal standard RT.

HFPO-DA\_00003



### CERTIFICATE OF ANALYSIS DOCUMENTATION |

PRODUCT CODE:

HEPO-CA

LOT NUMBER:

COMPOUND:

2,5,3,5-Yetrafluoro-2-(1,1,2,2,3,3,3-hepterJuoropropoxy)-propanoid add

STRUCTURE:

CASE

13252-13-6

MOLECULAR FORMULA:

C.HF.O.

CONCENTRATION:

50 ± 2.5 µg/ml

CHEMICAL PURITY:

>98%

LAST TESTED: (Harddd/yyy)

02/05/2014

EXPIRY DATE: (mm/ds/yyyy)

Stability studies ongoing

RECOMMENDED STORAGE

Store ampoule in a cool, dark place

MOLECULAR WEIGHT:

SOLVENTIS):

330.05

Methanol

DOCUMENTATION DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Date (Selected MRM Transitions)

EQUITIONAL INFORMATION:

See page 2 for further details.

AL DOZS PP

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Cortified By:

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N19 3M5 CANADA 619-822-2436 · Fax: 519-822-2849 · Info@woll-labs.com

Engal:27, Issued 2004-11-10 Revision#:2, Revised 2012-03-13 HFPOCA0213 (1 of 4)

#### INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

#### HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the hardling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to challenge and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

#### SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous mutes. They are then characterized, and their structures and purkles confirmed, using a combination of the most relevant techniques, such as NMR, GO/MS, LO/MS/MS, x-ray crystallography and melting point, isotopic puriles of mass-labelled compounds are also confirmed using HRGO/HRMS and/or LC/MS/MS.

#### HOMOGENEITY:

Prior to solution preparation, prystatine material is tasted for homogeneity using a variety of techniques (as stated above) and its solutility in a given discert is taken into consideration. Dupfloring solutions of a new product are prepared from the same crystalline for and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to clidar ich at the came manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage portainers.

#### UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard undertainty, v(y), of a value v and the uncertainty of the independent parameters

$$u_n(y(x_1,x_2,...x_n)) = \sqrt{\sum_{i=1}^{n} u(y_i x_i)^2}$$

Where it to expression as a colorive also dard uncartainty of the individual parameter.

The individual uncertaintee teren into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumear organization of the volumear organization of the volumear organization of the volumear. An experised maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all our products.

#### TRACEADULTY:

All reference standard solutions are treceable to specific divisibilitie lots. The microbalances used for solution preparation are regularly tested by an external, (SO/IEC 17026:2006 accredited calibration company, in addition, their calibration is verified prior to each weighing using N(E) and/or N(C) traceable external weights. Fit volumetric glassware used is of Class A toleratics and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to MIST. For certain products, traceability to internace to mediaboratory studies has also been established.

#### EXPRYDATE LUBRICA OF NO PRICE

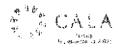
Chapting stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the copie date in the propened ampaule, workening for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

#### LIMITED WARRANTS

At the time of elipment, an products are wareasted to be the or defects in material and workmenship and to conform to the stated technical and purity specifications.

#### QUALITY MANAGEMENT

This product was produced using a Clusing Management Cystem registered to 18O 9001:2008 by SAI Global, ISO/IEC 170.25:20.35 by the Committee Appendation to CALA, A 1228), and ISO GUIDE 34:2009 by ACLASS (certificate number AFC 520)

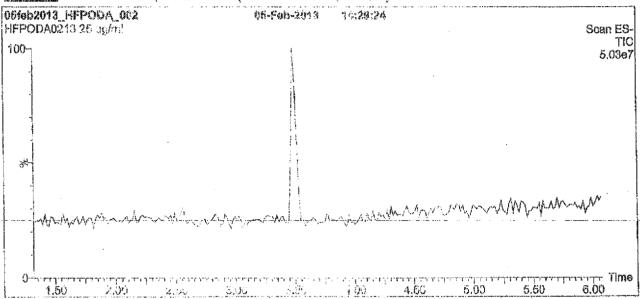


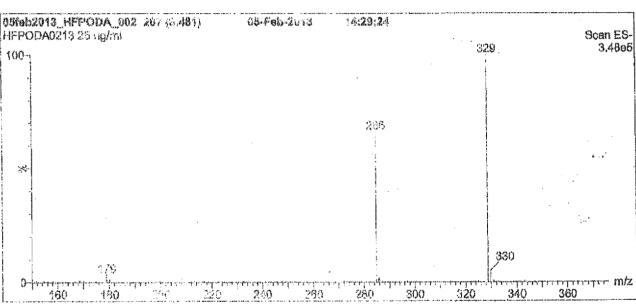


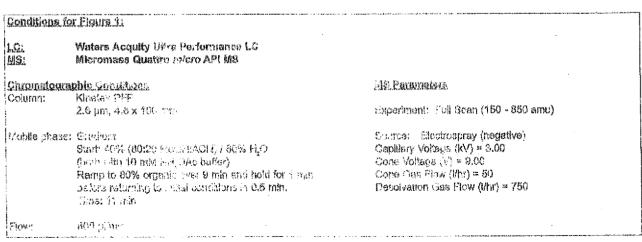
"For additions: information or assistance concording this or any other products from Wellington Laboratories Inc., pienes this our website at <a href="https://www.well-labs.com">www.well-labs.com</a> or contact us directly at <a href="https://www.well-labs.com">www.well-labs.com</a>

HFPGDA0218 (2 of 4)

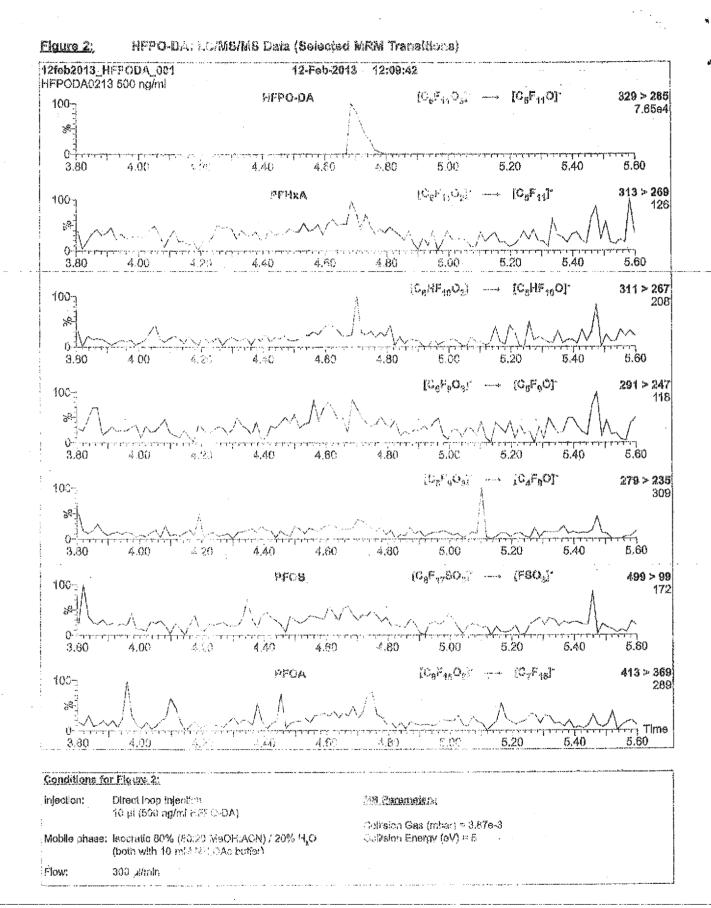








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HFPO-DA\_00004



### CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

HFPO-DA

LOT NUMBER: HFPODA0717

COMPOUND:

2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanolc acid

STRUCTURE:

CAS #:

13252-13-6

**MOLECULAR FORMULA:** 

C,HF,O,

MOLECULAR WEIGHT:

330,05

**CONCENTRATION:** 

 $50 \pm 2.5 \,\mu g/ml$ 

SOLVENT(S):

Methanol

**CHEMICAL PURITY:** 

>98%

LAST TESTED: (mm/dd/yyyy)

07/13/2017

EXPIRY DATE: (mm/dd/yyyy)

07/13/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

#### **DOCUMENTATION/ DATA ATTACHED:**

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

#### ADDITIONAL INFORMATION:

See page 2 for further details.

Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim, General Manager

Date: 07/14/2017

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA 519-822-2436 • Fax: 519-822-2849 • Info@well-labs.com

#### INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

#### **HAZARDS:**

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

#### SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

#### HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

#### **UNCERTAINTY:**

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, u(y), of a value y and the uncertainty of the independent parameters

$$x_i, x_2,...x_n$$
 on which it depends is: 
$$u_c(y(x_1,x_2,...x_n)) = \sqrt{\sum_{i=1}^n u(y,x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of  $\pm 5\%$  (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

#### TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

#### **EXPIRY DATE / PERIOD OF VALIDITY:**

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

#### LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

#### **QUALITY MANAGEMENT:**

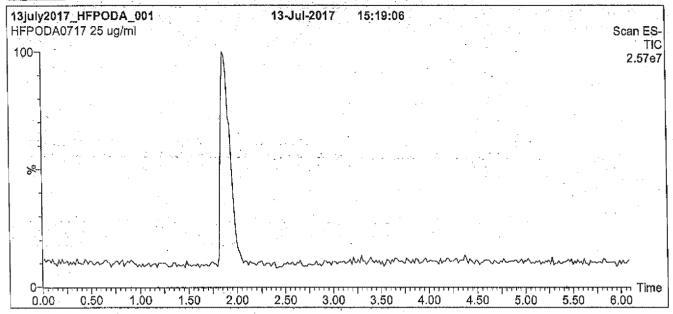
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

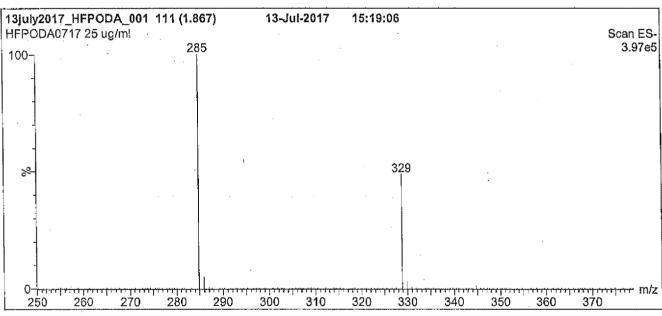




\*\*For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at <a href="https://www.well-labs.com">www.well-labs.com</a> or contact us directly at <a href="mailto:info@well-labs.com">info@well-labs.com</a>\*\*







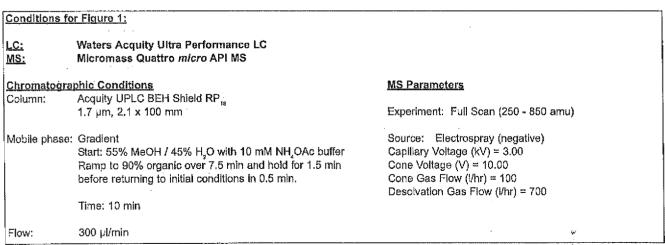
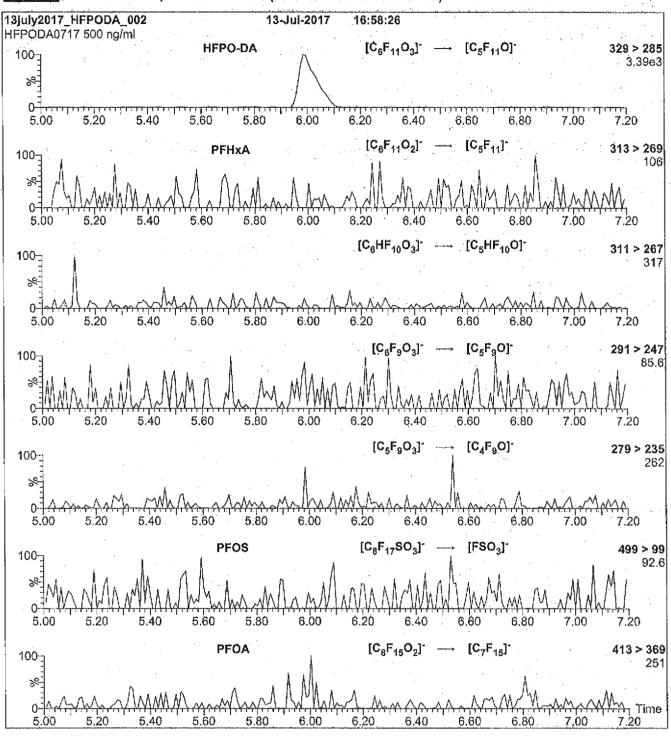
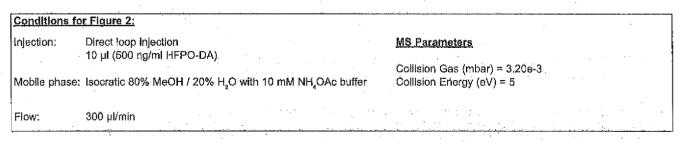


Figure 2: HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)





## 8321A HFPO Du

HFPO-DA

Lab Name:	TestAmerica Denver	Job No.	.: 280-106036-1
SDG No.:			

Matrix: Water Level: Low

GC Column (1): Synergi Hyd ID:

Client Sample ID	Lab Sample ID	HFPODA #
FAY-D-6377TABOR-W1 -1-020118	280-106036-1	66
FAY-D-6476TABOR-W1 -1-020118	280-106036-2	71
FAY-D-6476TABOR-W1 -1-020118-D	280-106036-3	70
FAY-D-6644TABOR-W1 -1-020118	280-106036-4	80
FAY-D-6644TABOR-W2 -1-020118	280-106036-5	68
FAY-D-6808TABOR-W1 -1-020118	280-106036-6	69
FAY-D-6838TABOR-W1 -1-020118	280-106036-7	70
FAY-D-6838TABOR-W2 -1-020118	280-106036-8	69
FAY-D-6858TABOR-W1 -1-020118	280-106036-9	71
FAY-D-7047TABOR-W1 -1-020118	280-106036-10	72
FAY-D-5049MATTH-W1 -1-020118	280-106036-11	77
FAY-D-7646TABOR-W1 -1-02018	280-106036-12	69
FAY-D-6731BUTLE-W1 -1-020118	280-106036-13	76
FAY-D-6731BUTLE-W1 -2-020118	280-106036-14	77
FAY-D-6815BUTLE-W1 -1-020118	280-106036-15	83
FAY-D-6893BUTLE-W1 -1-020118	280-106036-16	77
FAY-D-5018MRSHR-W1 -1-020118	280-106036-17	69
FAY-D-5018MRSHR-W1 -2-020118	280-106036-18	73
FAY-D-5021MRSHR-W1 -1-020118	280-106036-19	67
FAY-D-5021MRSHR-W1 -2-020118	280-106036-20	76
FAY-D-4065SPNSH-W1 -1-020118	280-106036-21	67
FAY-D-4065SPNSH-W1 -2-020118	280-106036-22	78
FAY-D-4057SPNSH-W1 -1-020118	280-106036-23	75
FAY-D-7265NC87H-W1 -1-020118	280-106036-24	68

HFPODA = 13C3 HFPO-DA

 $\frac{QC \text{ LIMITS}}{50-200}$ 

# Column to be used to flag recovery values

Lab	Name:	1 CD CI IIIC L I OG	Denver	Job	No.:	280-106036-1
SDG	No.:					

Matrix: Water Level: Low

GC Column (1): Synergi Hyd ID:

Client Sample ID	Lab Sample ID	HFPODA #
FAY-D-7394NC87H-W1 -1-020118	280-106036-25	87
FAY-D-6711CHKFT-W1	280-106036-26	76
FAY-D-6416CHKFT-W1 -1-020118	280-106036-27	78
FAY-D-6591BUTLE-W1 -1-020118	280-106036-28	77
FAY-D-7149BUTLE-W1 -1-020118	280-106036-29	82
FAY-D-7243BUTLE-W1	280-106036-30	85
-1-020118 FAY-D-5049MATTH-W1 -1-020118-D	280-106036-31	75
FAY-D-7609TABOR-W1	280-106036-32	71
FAY-D-7741TABOR-W1	280-106036-33	81
-1-020118 FAY-D-FB-020118-B	280-106036-34	82
FAY-D-47MAUDI-W1-1 -020118	280-106036-35	82
FAY-D-47MAUDI-W1-2 -020118	280-106036-36	81
FAY-D-1123NC20H-W1 -1-020118	280-106036-37	75
FAY-D-3322DANDE-W1 -1-020118	280-106036-38	82
FAY-D-3322DANDE-W1 -1-020118D	280-106036-39	113
FAY-D-4057SPNSH-W1 -2-020118	280-106036-40	107
FAY-D-5085MRSHR-W1 -1-020118	280-106036-41	118
FAY-D-FB-020118	280-106036-42	114
FAY-D-FB-020118-A	280-106036-43	111
	MB 280-404518/1-A	74
	MB 280-404551/1-A	72
	MB 280-404556/1-A	77
	MB 280-404557/1-A	81
	MB 280-404582/1-A	108
	MB 280-404785/1-A	83

 $\frac{QC \text{ LIMITS}}{50-200}$ 

HFPODA = 13C3 HFPO-DA

# Column to be used to flag recovery values

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
SDG No.:	
Matrix: Water	Level: Low

GC Column (1): Synergi Hyd ID:

Client Sample ID	Lab Sample ID	HFPODA #
	LCS	7.4
	280-404518/2-A	, 4
	LCS	7.4
	280-404551/2-A	
	LCS	78
	280-404556/2-A	, ,
	LCS	7.8
	280-404557/2-A	
	LCS	112
	280-404582/2-A	
	LCS	79
	280-404785/2-A	
	LCSD	71
	280-404518/3-A	
	LCSD	79
	280-404551/4-A	
	LCSD	7.5
	280-404556/3-A	
	LCSD	78
	280-404557/3-A	
	LCSD	112
	280-404582/3-A	
	LCSD	82
	280-404785/4-A	
	LLCS	73
	280-404518/4-A	
	LLCS	82
	280-404551/3-A	
	LLCS	76
	280-404556/4-A	
	LLCS	84
	280-404557/4-A	
	LLCS	119
	280-404582/4-A	
	LLCS	84
	280-404785/3-A	
FAY-D-6476TABOR-W1	280-106036-2 MS	63
-1-020118 MS		
FAY-D-5049MATTH-W1	280-106036-11 MS	76
-1-020118 MS		
FAY-D-3322DANDE-W1	280-106036-38 MS	83
-1-020118 MS		
FAY-D-6476TABOR-W1	280-106036-2 DU	66
-1-020118 DU		
FAY-D-5049MATTH-W1	280-106036-11 DU	73
-1-020118 DU		
FAY-D-3322DANDE-W1	280-106036-38 DU	78
-1-020118 DU		

HFPODA = 13C3 HFPO-DA

 $\frac{QC \text{ LIMITS}}{50-200}$ 

 $\ensuremath{\text{\#}}$  Column to be used to flag recovery values

Lab Name: TestAmerica Denver	Job No.: 280-106036-1		
SDG No.:			
Matrix: Water	Level: Low		
GC Column (1): Synergi Hyd ID:			

Client Sample ID	Lab Sample ID	HFPODA #
	DLCK 280-404345/13	104

 $\frac{\text{QC LIMITS}}{50-200}$ 

HFPODA = 13C3 HFPO-DA

 $\ensuremath{\text{\#}}$  Column to be used to flag recovery values

## FORM III LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B12065.d

Lab ID: LCS 280-404518/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
HFPO-DA	0.200	0.203	102	70-130	

# Column to be used to flag recovery and RPD values FORM III 8321A

## FORM III LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B12083.d

Lab ID: LCS 280-404551/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
HFPO-DA	0.200	0.202	101	70-130	

 $\mbox{\#}$  Column to be used to flag recovery and RPD values FORM III 8321A

## FORM III LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab ID: LCS 280-404556/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
HFPO-DA	0.200	0.192	96	70-130	

 $\mbox{\#}$  Column to be used to flag recovery and RPD values FORM III 8321A

# FORM III LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B12137.d

Lab ID: LCS 280-404557/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
HFPO-DA	0.200	0.191	95	70-130	

# FORM III LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab ID: LCS 280-404582/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
HFPO-DA	0.200	0.157	78	70-130	

# FORM III LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B14009.d

Lab ID: LCS 280-404785/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
HFPO-DA	0.200	0.201	101	70-130	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B12066.d

Lab ID: LCSD 280-404518/3-A Client ID:

	SPIKE	LCSD	LCSD		QC LIMITS		
	ADDED	CONCENTRATION	용	용			#
COMPOUND	(ug/L)	(ug/L)	REC	RPD	RPD	REC	
HFPO-DA	0.200	0.212	106	4	20	70-130	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B12085.d

Lab ID: LCSD 280-404551/4-A Client ID:

	SPIKE	LCSD	LCSD		QC LIMITS		
	ADDED	CONCENTRATION	용	ક			#
COMPOUND	(ug/L)	(ug/L)	REC	RPD	RPD	REC	
HFPO-DA	0.200	0.192	96	5	20	70-130	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B12109.d

Lab ID: LCSD 280-404556/3-A Client ID:

	SPIKE	LCSD	LCSD		QC LIMITS		
	ADDED	CONCENTRATION	용	용			#
COMPOUND	(ug/L)	(ug/L)	REC	RPD	RPD	REC	
HFPO-DA	0.200	0.202	101	5	20	70-130	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B12138.d

Lab ID: LCSD 280-404557/3-A Client ID:

	SPIKE	LCSD	LCSD		QC LIMITS		
	ADDED	CONCENTRATION	용	용			#
COMPOUND	(ug/L)	(ug/L)	REC	RPD	RPD	REC	
HFPO-DA	0.200	0.203	102	6	20	70-130	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B13085.d

Lab ID: LCSD 280-404582/3-A Client ID:

	SPIKE LCSD LCSD ADDED CONCENTRATION % %			QC L	#		
COMPOUND	(ug/L)	CONCENTRATION (ug/L)	REC	RPD	RPD	REC	#
HFPO-DA	0.200	0.157	78	0	20	70-130	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B14011.d

Lab ID: LCSD 280-404785/4-A Client ID:

	SPIKE	LCSD	LCSD		QC LIMITS		
	ADDED	CONCENTRATION	용	용			#
COMPOUND	(ug/L)	(ug/L)	REC	RPD	RPD	REC	
HFPO-DA	0.200	0.192	96	5	20	70-130	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B12067.d

Lab ID: LLCS 280-404518/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LLCS CONCENTRATION (ug/L)	LLCS % REC	QC LIMITS REC	#
HFPO-DA	0.0200	0.0223	111	70-130	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B12084.d

Lab ID: LLCS 280-404551/3-A Client ID:

	SPIKE ADDED	LLCS CONCENTRATION	LLCS	QC LIMITS	#
COMPOUND	(ug/L)	(ug/L)	REC	REC	π
HFPO-DA	0.0200	0.0173	86	70-130	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B12110.d

Lab ID: LLCS 280-404556/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LLCS CONCENTRATION (ug/L)	LLCS % REC	QC LIMITS REC	#
HFPO-DA	0.0200	0.0186	93	70-130	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B12139.d

Lab ID: LLCS 280-404557/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LLCS CONCENTRATION (ug/L)	LLCS % REC	QC LIMITS REC	#
HFPO-DA	0.0200	0.0190	95	70-130	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B13086.d

Lab ID: LLCS 280-404582/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LLCS CONCENTRATION (ug/L)	LLCS % REC	QC LIMITS REC	#
HFPO-DA	0.0200	0.0167	83	70-130	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B14010.d

Lab ID: LLCS 280-404785/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LLCS CONCENTRATION (ug/L)	LLCS % REC	QC LIMITS REC	#
HFPO-DA	0.0200	0.0178	89	70-130	

# FORM III LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab ID: 280-106036-2 MS Client ID: FAY-D-6476TABOR-W1-1-020118 MS

	SPIKE	SAMPLE	MS	MS	QC	
	ADDED	CONCENTRATION	CONCENTRATION	용	LIMITS	#
COMPOUND	(ug/L)	(ug/L)	(ug/L)	REC	REC	
HFPO-DA	0.176	0.036	0.237	115	70-130	

# FORM III LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B12097.d

Lab ID: 280-106036-11 MS Client ID: FAY-D-5049MATTH-W1-1-020118 MS

	SPIKE	SAMPLE	MS	MS	QC	
	ADDED	CONCENTRATION	CONCENTRATION	용	LIMITS	#
COMPOUND	(ug/L)	(ug/L)	(ug/L)	REC	REC	
HFPO-DA	0.181	0.11	0.280	94	70-130	

# FORM III LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab ID: 280-106036-38 MS Client ID: FAY-D-3322DANDE-W1-1-020118 MS

	SPIKE	SAMPLE	MS	MS	QC	
	ADDED	CONCENTRATION	CONCENTRATION	용	LIMITS	#
COMPOUND	(ug/L)	(ug/L)	(ug/L)	REC	REC	
HFPO-DA	0.167	<0.010	0.157	95	70-130	

# FORM III LCMS DETECTION LIMIT CHECK STANDARD RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Level: Low Lab File ID: hfpo718B08044.d

Lab ID: DLCK 280-404345/13 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	DLCK CONCENTRATION (ug/L)	DLCK % REC	QC LIMITS REC	#
HFPO-DA	0.250	<0.50	90	70-130	

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
SDG No.:	
Lab File ID: hfpo718B12064.d	Lab Sample ID: MB 280-404518/1-A
Matrix: Water	Date Extracted: 02/09/2018 20:54
Instrument ID: LC_LCMS7	Date Analyzed: 02/12/2018 13:42
Level: (Low/Med) Low	

		LAB	
CLIENT SAMPLE ID	LAB SAMPLE ID	FILE ID	DATE ANALYZED
	LCS 280-404518/2-A	hfpo718B120 65.d	02/12/2018 13:45
	LCSD 280-404518/3-A	hfpo718B120 66.d	02/12/2018 13:48
	LLCS 280-404518/4-A	hfpo718B120 67.d	02/12/2018 13:52
FAY-D-6377TABOR-W1-1-020118	280-106036-1	hfpo718B120 68.d	02/12/2018 13:55
FAY-D-6476TABOR-W1-1-020118	280-106036-2	hfpo718B120 69.d	02/12/2018 13:58
FAY-D-6476TABOR-W1-1-020118 DU	280-106036-2 DU	hfpo718B120 70.d	02/12/2018 14:01
FAY-D-6476TABOR-W1-1-020118 MS	280-106036-2 MS	hfpo718B120 71.d	02/12/2018 14:05

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
SDG No.:	
Lab File ID: hfpo718B12082.d	Lab Sample ID: MB 280-404551/1-A
Matrix: Water	Date Extracted: 02/11/2018 11:55
Instrument ID: LC_LCMS7	Date Analyzed: 02/12/2018 14:41
Level: (Low/Med) Low	

CLIENE CAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALY	77 E E E
CLIENT SAMPLE ID	LCS 280-404551/2-A	hfpo718B120	02/12/2018	14:44
	LCS 200-404331/2-A	83.d	02/12/2016	14:44
	LLCS 280-404551/3-A	hfpo718B120	02/12/2018	14:47
	·	84.d		
	LCSD 280-404551/4-A	hfpo718B120 85.d	02/12/2018	14:50
FAY-D-6476TABOR-W1-1-020118-D	280-106036-3	hfpo718B120 86.d	02/12/2018	14:53
FAY-D-6644TABOR-W1-1-020118	280-106036-4	hfpo718B120 87.d	02/12/2018	14:57
FAY-D-6644TABOR-W2-1-020118	280-106036-5	hfpo718B120 89.d	02/12/2018	15:03
FAY-D-6808TABOR-W1-1-020118	280-106036-6	hfpo718B120 90.d	02/12/2018	15:06
FAY-D-6838TABOR-W1-1-020118	280-106036-7	hfpo718B120 91.d	02/12/2018	15:10
FAY-D-6838TABOR-W2-1-020118	280-106036-8	hfpo718B120 92.d	02/12/2018	15:13
FAY-D-6858TABOR-W1-1-020118	280-106036-9	hfpo718B120 93.d	02/12/2018	15:16
FAY-D-7047TABOR-W1-1-020118	280-106036-10	hfpo718B120 94.d	02/12/2018	15:19
FAY-D-5049MATTH-W1-1-020118	280-106036-11	hfpo718B120 95.d	02/12/2018	15:23
FAY-D-5049MATTH-W1-1-020118 DU	280-106036-11 DU	hfpo718B120 96.d	02/12/2018	15:26
FAY-D-5049MATTH-W1-1-020118 MS	280-106036-11 MS	hfpo718B120 97.d	02/12/2018	15:29
FAY-D-7646TABOR-W1-1-02018	280-106036-12	hfpo718B120 98.d	02/12/2018	15 <b>:</b> 32
FAY-D-6731BUTLE-W1-1-020118	280-106036-13	hfpo718B121 00.d	02/12/2018	15:39
FAY-D-6731BUTLE-W1-2-020118	280-106036-14	hfpo718B121 01.d	02/12/2018	15:42
FAY-D-6815BUTLE-W1-1-020118	280-106036-15	hfpo718B121 02.d	02/12/2018	15:45
FAY-D-6893BUTLE-W1-1-020118	280-106036-16	hfpo718B121 03.d	02/12/2018	15:49
FAY-D-5018MRSHR-W1-1-020118	280-106036-17	hfpo718B121 04.d	02/12/2018	15 <b>:</b> 52
FAY-D-5018MRSHR-W1-2-020118	280-106036-18	hfpo718B121 05.d	02/12/2018	15:55

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
SDG No.:	
Lab File ID: hfpo718B12107.d	Lab Sample ID: MB 280-404556/1-A
Matrix: Water	Date Extracted: 02/11/2018 19:22
Instrument ID: LC_LCMS7	Date Analyzed: 02/12/2018 16:02
Level: (Low/Med) Low	

		LAB	
CLIENT SAMPLE ID	LAB SAMPLE ID	FILE ID	DATE ANALYZED
	LCS 280-404556/2-A	hfpo718B121 08.d	02/12/2018 16:05
	LCSD 280-404556/3-A	hfpo718B121 09.d	02/12/2018 16:08
	LLCS 280-404556/4-A	hfpo718B121 10.d	02/12/2018 16:11
FAY-D-5021MRSHR-W1-1-020118	280-106036-19	hfpo718B121 11.d	02/12/2018 16:15
FAY-D-5021MRSHR-W1-2-020118	280-106036-20	hfpo718B121 12.d	02/12/2018 16:18
FAY-D-4065SPNSH-W1-1-020118	280-106036-21	hfpo718B121 13.d	02/12/2018 16:21
FAY-D-4065SPNSH-W1-2-020118	280-106036-22	hfpo718B121 14.d	02/12/2018 16:25

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
SDG No.:	
Lab File ID: hfpo718B12136.d	Lab Sample ID: MB 280-404557/1-A
Matrix: Water	Date Extracted: 02/11/2018 19:44
Instrument ID: LC_LCMS7	Date Analyzed: 02/12/2018 17:36
Level: (Low/Med) Low	

		LAB	
CLIENT SAMPLE ID	LAB SAMPLE ID	FILE ID	DATE ANALYZED
	LCS 280-404557/2-A	hfpo718B121 37.d	02/12/2018 17:40
	LCSD 280-404557/3-A	hfpo718B121 38.d	02/12/2018 17:43
	LLCS 280-404557/4-A	hfpo718B121 39.d	02/12/2018 17:46
FAY-D-4057SPNSH-W1-1-020118	280-106036-23	hfpo718B121 40.d	02/12/2018 17:49
FAY-D-7265NC87H-W1-1-020118	280-106036-24	hfpo718B121 41.d	02/12/2018 17:53
FAY-D-7394NC87H-W1-1-020118	280-106036-25	hfpo718B121 42.d	02/12/2018 17:56
FAY-D-6711CHKFT-W1-1-020118	280-106036-26	hfpo718B121 43.d	02/12/2018 17:59

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
SDG No.:	
Lab File ID: hfpo718B13083.d	Lab Sample ID: MB 280-404582/1-A
Matrix: Water	Date Extracted: 02/12/2018 08:23
Instrument ID: LC_LCMS7	Date Analyzed: 02/13/2018 12:26
Level: (Low/Med) Low	

		LAB	
CLIENT SAMPLE ID	LAB SAMPLE ID	FILE ID	DATE ANALYZED
	LCS 280-404582/2-A	hfpo718B130 84.d	02/13/2018 12:29
	LCSD 280-404582/3-A	hfpo718B130 85.d	02/13/2018 12:32
	LLCS 280-404582/4-A	hfpo718B130 86.d	02/13/2018 12:36
FAY-D-3322DANDE-W1-1-020118D	280-106036-39	hfpo718B130 87.d	02/13/2018 12:39
FAY-D-4057SPNSH-W1-2-020118	280-106036-40	hfpo718B130 88.d	02/13/2018 12:42
FAY-D-5085MRSHR-W1-1-020118	280-106036-41	hfpo718B130 89.d	02/13/2018 12:45
FAY-D-FB-020118	280-106036-42	hfpo718B130 90.d	02/13/2018 12:49
FAY-D-FB-020118-A	280-106036-43	hfpo718B130 91.d	02/13/2018 12:52

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
SDG No.:	
Lab File ID: hfpo718B14008.d	Lab Sample ID: MB 280-404785/1-A
Matrix: Water	Date Extracted: 02/13/2018 11:30
Instrument ID: LC_LCMS7	Date Analyzed: 02/14/2018 08:03
Level: (Low/Med) Low	

		LAB		
CLIENT SAMPLE ID	LAB SAMPLE ID	FILE ID	DATE ANALY	ZED
	LCS 280-404785/2-A	hfpo718B140 09.d	02/14/2018	08:07
	LLCS 280-404785/3-A	hfpo718B140 10.d	02/14/2018	08:10
	LCSD 280-404785/4-A	hfpo718B140 11.d	02/14/2018	08:13
FAY-D-6416CHKFT-W1-1-020118	280-106036-27	hfpo718B140 12.d	02/14/2018	08:16
FAY-D-6591BUTLE-W1-1-020118	280-106036-28	hfpo718B140 13.d	02/14/2018	08:20
FAY-D-7149BUTLE-W1-1-020118	280-106036-29	hfpo718B140 14.d	02/14/2018	08:23
FAY-D-7243BUTLE-W1-1-020118	280-106036-30	hfpo718B140 15.d	02/14/2018	08:26
FAY-D-5049MATTH-W1-1-020118-D	280-106036-31	hfpo718B140 16.d	02/14/2018	08:30
FAY-D-7609TABOR-W1-1-020118	280-106036-32	hfpo718B140 17.d	02/14/2018	08:33
FAY-D-7741TABOR-W1-1-020118	280-106036-33	hfpo718B140 19.d	02/14/2018	08:39
FAY-D-FB-020118-B	280-106036-34	hfpo718B140 20.d	02/14/2018	08:43
FAY-D-47MAUDI-W1-1-020118	280-106036-35	hfpo718B140 21.d	02/14/2018	08:46
FAY-D-47MAUDI-W1-2-020118	280-106036-36	hfpo718B140 22.d	02/14/2018	08:49
FAY-D-1123NC20H-W1-1-020118	280-106036-37	hfpo718B140 23.d	02/14/2018	08:52
FAY-D-3322DANDE-W1-1-020118	280-106036-38	hfpo718B140 24.d	02/14/2018	08:56
FAY-D-3322DANDE-W1-1-020118 DU	280-106036-38 DU	hfpo718B140 25.d	02/14/2018	08:59
FAY-D-3322DANDE-W1-1-020118 MS	280-106036-38 MS	hfpo718B140 26.d	02/14/2018	09:02

### FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6377TABOR-W1-1-0201 Lab Sample ID: 280-106036-1 18 Lab File ID: hfpo718B12068.d Matrix: Water Date Collected: 02/01/2018 08:47 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/09/2018 20:54 Sample wt/vol: 279.5(mL) Date Analyzed: 02/12/2018 13:55 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404641 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.012		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	66		50-200

Report Date: 12-Feb-2018 14:31:25 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12068.d

Lims ID: 280-106036-C-1-A

Client ID: FAY-D-6377TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 13:55:17 ALS Bottle#: 40 Worklist Smp#: 35

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-1-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Date:

12-Feb-2018 14:30:10

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera

**EXP** DLT REL Amount Signal RT RT RT RT Response ug/l S/N Flags \$ 3 13C3 HFPO-DA 331.8 > 286.8 0.920 1.045 -0.125 1.000 491617 6.58 1005 \* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.920 1.045 -0.125 491617 10.0 1005 1 Perfluoro(2-propoxypropanoic) acid Μ 1.056 -0.136 328.8 > 284.8 0.920 1.000 37488 0.6828 5.9 Μ

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 12-Feb-2018 14:31:25 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

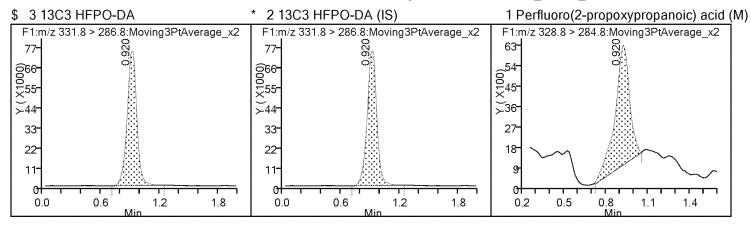
Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12068.d

Client ID: FAY-D-6377TABOR-W1-1-020118

Operator ID: JBH ALS Bottle#: 40 Worklist Smp#: 35

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 12-Feb-2018 14:31:25 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12068.d

Lims ID: 280-106036-C-1-A

Client ID: FAY-D-6377TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 13:55:17 ALS Bottle#: 40 Worklist Smp#: 35

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-1-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:30:10

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	6.58	65.85

Report Date: 12-Feb-2018 14:31:25 Chrom Revision: 2.2 24-Jan-2018 15:37:30 Manual Integration/User Assign Peak Report

#### TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12068.d

Injection Date: 12-Feb-2018 13:55:17 Instrument ID: LC LCMS7 280-106036-1 Lims ID: 280-106036-C-1-A Lab Sample ID:

Client ID: FAY-D-6377TABOR-W1-1-020118

Operator ID: 40 35 **JBH** ALS Bottle#: Worklist Smp#:

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: **HFPO** Limit Group: LC - 8321A\_HFPO\_Du

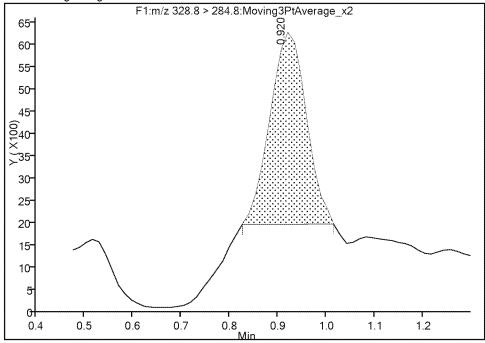
Column: Detector F1:MRM

### 1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

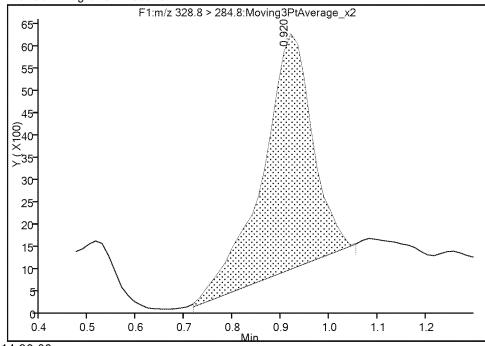
RT: 0.92 Area: 22015 Amount: 0.386989 Amount Units: ug/l

Processing Integration Results



RT: 0.92 Area: 37488 Amount: 0.682850 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 12-Feb-2018 14:30:09

Audit Action: Manually Integrated

Audit Reason: Baseline

Page 210 of 711

### FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6476TABOR-W1-1-0201 Lab Sample ID: 280-106036-2 18 Lab File ID: hfpo718B12069.d Matrix: Water Date Collected: 02/01/2018 09:22 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/09/2018 20:54 Sample wt/vol: 274(mL) Date Analyzed: 02/12/2018 13:58 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup:(Y/N) N Analysis Batch No.: 404641 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.036		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	71		50-200

Report Date: 12-Feb-2018 14:31:26 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12069.d

Lims ID: 280-106036-E-2-A

Client ID: FAY-D-6476TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 13:58:34 ALS Bottle#: 41 Worklist Smp#: 36

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-E-2-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:30:14

		,							
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFP	O-DA								
331.8 > 286.8	0.920	1.045	-0.125	1.000	527250	7.06	1061		
* 2 13C3 HFP	O-DA (IS)								
331.8 > 286.8	0.920	1.045	-0.125		527250	10.0	1061		
1 Perfluoro(2	?-propoxyp	ropanoi	ic) acid						
328.8 > 284.8	0.934	1.056	-0.122	1.000	111600	1.96	28.4		

Report Date: 12-Feb-2018 14:31:26 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

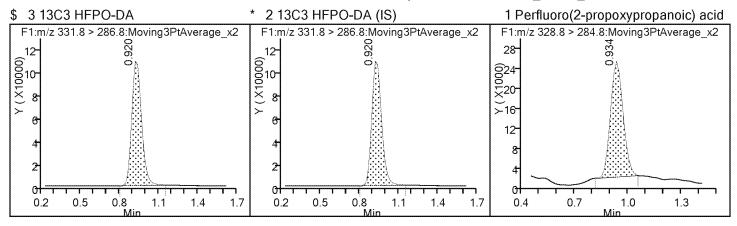
Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12069.d

Client ID: FAY-D-6476TABOR-W1-1-020118

Operator ID: JBH ALS Bottle#: 41 Worklist Smp#: 36

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 12-Feb-2018 14:31:26 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12069.d

Lims ID: 280-106036-E-2-A

Client ID: FAY-D-6476TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 13:58:34 ALS Bottle#: 41 Worklist Smp#: 36

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-E-2-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:30:14

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.06	70.62

### FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6476TABOR-W1-1-0201 Lab Sample ID: 280-106036-3 18-D Lab File ID: hfpo718B12086.d Matrix: Water Date Collected: 02/01/2018 09:22 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 275.9(mL) Date Analyzed: 02/12/2018 14:53 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.038		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	70		50-200

Report Date: 13-Feb-2018 07:56:20 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12086.d

Lims ID: 280-106036-C-3-A

Client ID: FAY-D-6476TABOR-W1-1-020118-D

Sample Type: Client

Inject. Date: 12-Feb-2018 14:53:57 ALS Bottle#: 8 Worklist Smp#: 53

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-3-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:52:59 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:47:23

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	524786	7.03	1898	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		524786	10.0	1898	
1 Perfluoro(2-propoxypropanoic) acid								
328.8 > 284.8	0.934	1.056	-0.122	1.000	117690	2.07	28.4	

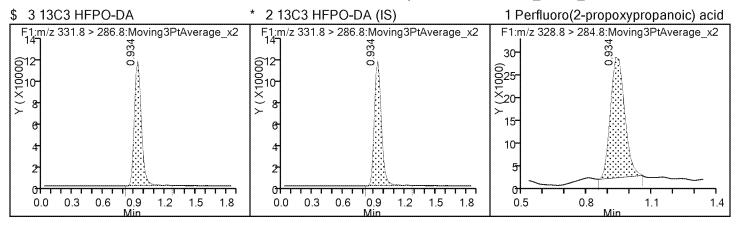
TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12086.d

Client ID: FAY-D-6476TABOR-W1-1-020118-D

Operator ID: JBH ALS Bottle#: 8 Worklist Smp#: 53

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12086.d

Lims ID: 280-106036-C-3-A

Client ID: FAY-D-6476TABOR-W1-1-020118-D

Sample Type: Client

Inject. Date: 12-Feb-2018 14:53:57 ALS Bottle#: 8 Worklist Smp#: 53

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-3-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:52:59 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.03	70.29

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6644TABOR-W1-1-0201 Lab Sample ID: 280-106036-4 18 Lab File ID: hfpo718B12087.d Matrix: Water Date Collected: 02/01/2018 09:56 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 264.9(mL) Date Analyzed: 02/12/2018 14:57 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	80		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12087.d

Lims ID: 280-106036-B-4-A

Client ID: FAY-D-6644TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 14:57:12 ALS Bottle#: 9 Worklist Smp#: 54

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-4-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:52:59 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFP0	D-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	594527	7.96	1375	
* 2 13C3 HFPC	D-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		594527	10.0	1375	

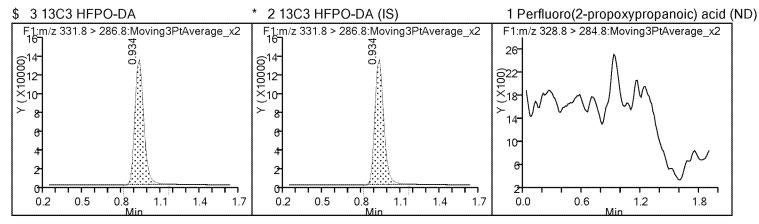
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12087.d

Client ID: FAY-D-6644TABOR-W1-1-020118

Operator ID: JBH ALS Bottle#: 9 Worklist Smp#: 54

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12087.d

Lims ID: 280-106036-B-4-A

Client ID: FAY-D-6644TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 14:57:12 ALS Bottle#: 9 Worklist Smp#: 54

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-4-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:52:59 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.96	79.63

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6644TABOR-W2-1-0201 Lab Sample ID: 280-106036-5 18 Lab File ID: hfpo718B12089.d Matrix: Water Date Collected: 02/01/2018 09:57 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 293.3(mL) Date Analyzed: 02/12/2018 15:03 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	68		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12089.d

Lims ID: 280-106036-A-5-A

Client ID: FAY-D-6644TABOR-W2-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:03:40 ALS Bottle#: 10 Worklist Smp#: 56

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-5-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:47:39

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.975	1.045	-0.070	1.000	504946	6.76	1647	
* 2 13C3 HFPC	DA (IS)							
331.8 > 286.8	0.975	1.045	-0.070		504946	10.0	1647	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					М
328.8 > 284.8	0.988	1.056	-0.068	1.000	32060	0.5629	5.0	M

#### QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Denver

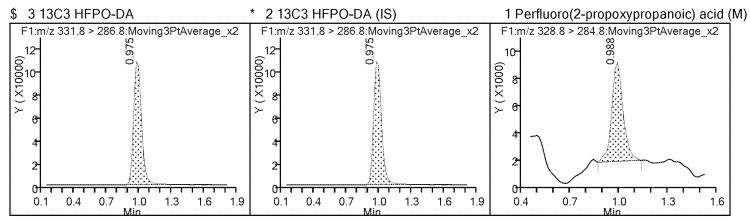
Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12089.d

Injection Date: 12-Feb-2018 15:03:40 Instrument ID: LC\_LCMS7 Lims ID: 280-106036-A-5-A Lab Sample ID: 280-106036-5

Client ID: FAY-D-6644TABOR-W2-1-020118

Operator ID: JBH ALS Bottle#: 10 Worklist Smp#: 56

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12089.d

Lims ID: 280-106036-A-5-A

Client ID: FAY-D-6644TABOR-W2-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:03:40 ALS Bottle#: 10 Worklist Smp#: 56

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-5-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	6.76	67.63

Report Date: 13-Feb-2018 07:56:22 Chrom Revision: 2.2 08-Feb-2018 13:38:42 Manual Integration/User Assign Peak Report

#### TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12089.d

Injection Date: 12-Feb-2018 15:03:40 Instrument ID: LC LCMS7 280-106036-5 Lims ID: 280-106036-A-5-A Lab Sample ID:

Client ID: FAY-D-6644TABOR-W2-1-020118

Operator ID: ALS Bottle#: 10 56 **JBH** Worklist Smp#:

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: **HFPO** Limit Group: LC - 8321A\_HFPO\_Du

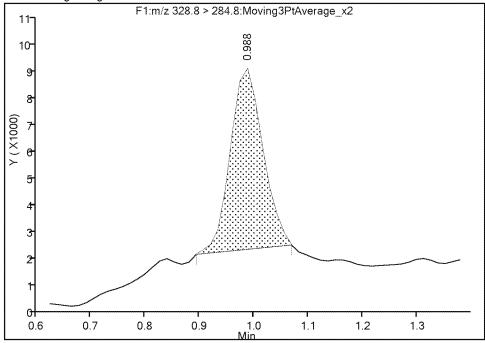
Column: Detector F1:MRM

#### 1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

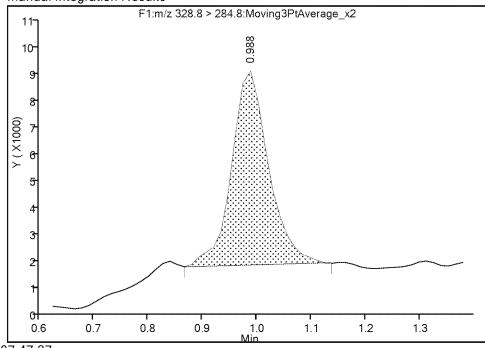
RT: 0.99 Area: 26342 Amount: 0.456430 Amount Units: ug/l

Processing Integration Results



RT: 0.99 Area: 32060 Amount: 0.562878 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 13-Feb-2018 07:47:37

Audit Action: Manually Integrated

Audit Reason: Baseline

Page 227 of 711

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6808TABOR-W1-1-0201 Lab Sample ID: 280-106036-6 18 Lab File ID: hfpo718B12090.d Matrix: Water Date Collected: 02/01/2018 10:45 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 273.9(mL) Date Analyzed: 02/12/2018 15:06 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	69		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12090.d

Lims ID: 280-106036-D-6-A

Client ID: FAY-D-6808TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:06:54 ALS Bottle#: 11 Worklist Smp#: 57

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-6-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

		,				-		
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	D-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	512260	6.86	1047	
* 2 13C3 HFPC	DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		512260	10.0	1047	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	33180	0.5749	8.8	

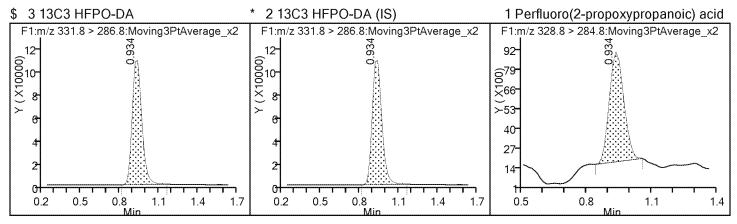
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12090.d

Client ID: FAY-D-6808TABOR-W1-1-020118

Operator ID: JBH ALS Bottle#: 11 Worklist Smp#: 57

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12090.d

Lims ID: 280-106036-D-6-A

Client ID: FAY-D-6808TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:06:54 ALS Bottle#: 11 Worklist Smp#: 57

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-6-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	6.86	68.61

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6838TABOR-W1-1-0201 Lab Sample ID: 280-106036-7 18 Lab File ID: hfpo718B12091.d Matrix: Water Date Collected: 02/01/2018 11:03 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 271.5(mL) Date Analyzed: 02/12/2018 15:10 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.012		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	70		50-200

TestAmerica Denver

**Target Compound Quantitation Report** 

Data File: \ChromNA\Denver\ChromData\LC LCMS7\20180212-67162.b\hfpo718B12091.d

Lims ID: 280-106036-A-7-A

Client ID: FAY-D-6838TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:10:09 ALS Bottle#: 12 Worklist Smp#: 58

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-7-A

Misc. Info.: HFPO18B12

Operator ID: **JBH** Instrument ID: LC LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: 

Date:

13-Feb-2018 07:47:48

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera

**EXP** DLT REL Amount Signal RT RT RT RT Response ug/l S/N Flags \$ 3 13C3 HFPO-DA 331.8 > 286.8 0.934 1.045 -0.111 1.000 520131 6.97 1423

\* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.934 1.045 -0.111 520131 10.0 1423

1 Perfluoro(2-propoxypropanoic) acid 1.056 -0.122 328.8 > 284.8 0.934 1.000 39115 0.6730 10.4

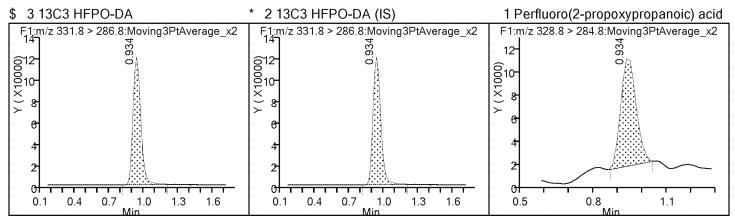
TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12091.d

Client ID: FAY-D-6838TABOR-W1-1-020118

Operator ID: JBH ALS Bottle#: 12 Worklist Smp#: 58

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12091.d

Lims ID: 280-106036-A-7-A

Client ID: FAY-D-6838TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:10:09 ALS Bottle#: 12 Worklist Smp#: 58

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-7-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	6.97	69.67

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6838TABOR-W2-1-0201 Lab Sample ID: 280-106036-8 18 Lab File ID: hfpo718B12092.d Matrix: Water Date Collected: 02/01/2018 11:04 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 281.2(mL) Date Analyzed: 02/12/2018 15:13 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS		COMPOUND NAME	RESULT	Q	RL	
13232	-13-6	HFPO-DA	0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	69		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12092.d

Lims ID: 280-106036-C-8-A

Client ID: FAY-D-6838TABOR-W2-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:13:23 ALS Bottle#: 13 Worklist Smp#: 59

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-8-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

		,						
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFP0	D-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	517790	6.94	1552	
* 2 13C3 HFPC	D-DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		517790	10.0	1552	
1 Perfluoro(2-	propoxyp	oropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	33642	0.5768	9.5	

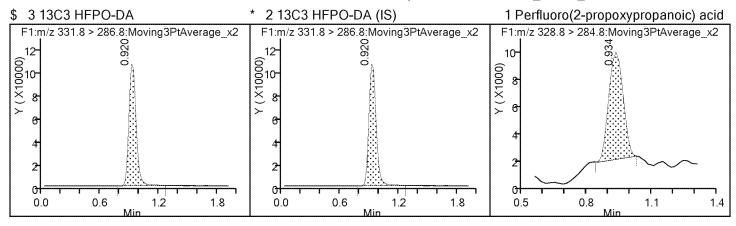
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12092.d

Client ID: FAY-D-6838TABOR-W2-1-020118

Operator ID: JBH ALS Bottle#: 13 Worklist Smp#: 59

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12092.d

Lims ID: 280-106036-C-8-A

Client ID: FAY-D-6838TABOR-W2-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:13:23 ALS Bottle#: 13 Worklist Smp#: 59

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-8-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	6.94	69.35

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6858TABOR-W1-1-0201 Lab Sample ID: 280-106036-9 18 Lab File ID: hfpo718B12093.d Matrix: Water Date Collected: 02/01/2018 11:13 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 301.4(mL) Date Analyzed: 02/12/2018 15:16 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.025		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	71		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12093.d

Lims ID: 280-106036-C-9-A

Client ID: FAY-D-6858TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:16:38 ALS Bottle#: 14 Worklist Smp#: 60

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-9-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	528646	7.08	1212	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		528646	10.0	1212	
1 Perfluoro(2-propoxypropanoic) acid								
328.8 > 284.8	0.934	1.056	-0.122	1.000	85002	1.48	16.2	

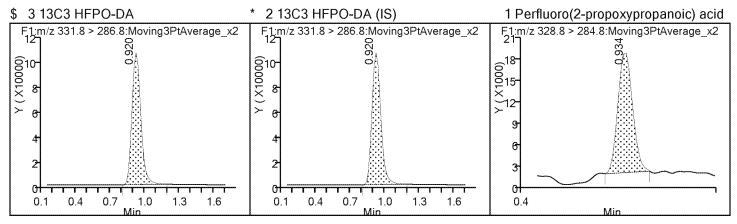
TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12093.d

Client ID: FAY-D-6858TABOR-W1-1-020118

Operator ID: JBH ALS Bottle#: 14 Worklist Smp#: 60

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12093.d

Lims ID: 280-106036-C-9-A

Client ID: FAY-D-6858TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:16:38 ALS Bottle#: 14 Worklist Smp#: 60

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-9-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.08	70.81

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-7047TABOR-W1-1-0201 Lab Sample ID: 280-106036-10 18 Lab File ID: hfpo718B12094.d Matrix: Water Date Collected: 02/01/2018 11:51 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 276.9(mL) Date Analyzed: 02/12/2018 15:19 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.13		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	72		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12094.d

Lims ID: 280-106036-A-10-A

Client ID: FAY-D-7047TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:19:52 ALS Bottle#: 15 Worklist Smp#: 61

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-10-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

		,						
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	D-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	536738	7.19	1377	
* 2 13C3 HFPC	DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		536738	10.0	1377	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	400681	6.98	84.1	

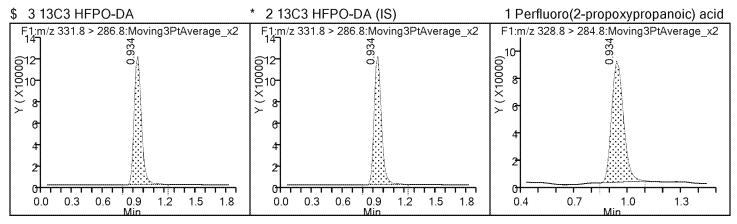
TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12094.d

Client ID: FAY-D-7047TABOR-W1-1-020118

Operator ID: JBH ALS Bottle#: 15 Worklist Smp#: 61

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12094.d

Lims ID: 280-106036-A-10-A

Client ID: FAY-D-7047TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:19:52 ALS Bottle#: 15 Worklist Smp#: 61

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-10-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.19	71.89

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-5049MATTH-W1-1-0201 Lab Sample ID: 280-106036-11 18 Lab File ID: hfpo718B12095.d Matrix: Water Date Collected: 02/01/2018 13:48 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 287.7(mL) Date Analyzed: 02/12/2018 15:23 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.11		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	77		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12095.d

Lims ID: 280-106036-A-11-A

Client ID: FAY-D-5049MATTH-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:23:07 ALS Bottle#: 16 Worklist Smp#: 62

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-11-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	573508	7.68	1677	
* 2 13C3 HFPC	DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		573508	10.0	1677	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.947	1.056	-0.109	1.000	387101	6.31	87.0	

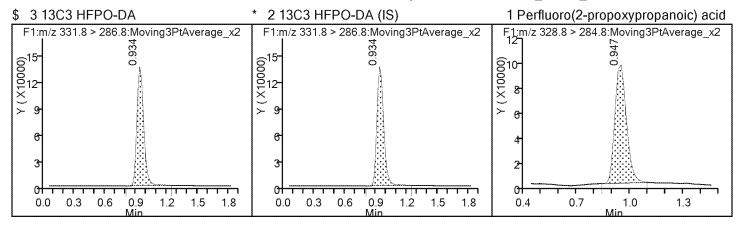
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12095.d

Client ID: FAY-D-5049MATTH-W1-1-020118

Operator ID: JBH ALS Bottle#: 16 Worklist Smp#: 62

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12095.d

Lims ID: 280-106036-A-11-A

Client ID: FAY-D-5049MATTH-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:23:07 ALS Bottle#: 16 Worklist Smp#: 62

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-11-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.68	76.82

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-7646TABOR-W1-1-0201 Lab Sample ID: 280-106036-12 Matrix: Water Lab File ID: hfpo718B12098.d Date Collected: 02/01/2018 14:55 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 282.4(mL) Date Analyzed: 02/12/2018 15:32 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.029		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	69		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12098.d

Lims ID: 280-106036-A-12-A

Client ID: FAY-D-7646TABOR-W1-02018

Sample Type: Client

Inject. Date: 12-Feb-2018 15:32:51 ALS Bottle#: 19 Worklist Smp#: 65

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-12-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	518570	6.95	1196	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		518570	10.0	1196	
1 Perfluoro(2- <sub>l</sub>	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.947	1.056	-0.109	1.000	92456	1.64	21.7	

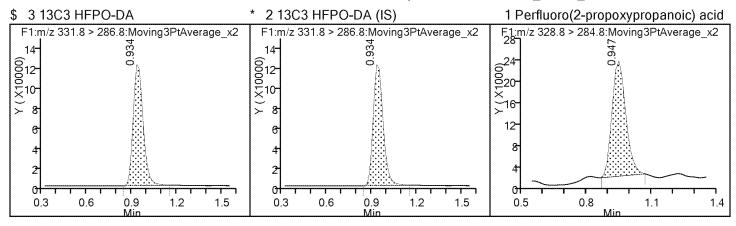
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12098.d

Client ID: FAY-D-7646TABOR-W1-02018

Operator ID: JBH ALS Bottle#: 19 Worklist Smp#: 65

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12098.d

Lims ID: 280-106036-A-12-A

Client ID: FAY-D-7646TABOR-W1-02018

Sample Type: Client

Inject. Date: 12-Feb-2018 15:32:51 ALS Bottle#: 19 Worklist Smp#: 65

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-12-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	6.95	69.46

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6731BUTLE-W1-1-0201 Lab Sample ID: 280-106036-13 18 Lab File ID: hfpo718B12100.d Matrix: Water Date Collected: 02/01/2018 08:24 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 293.9(mL) Date Analyzed: 02/12/2018 15:39 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

	CAS NO.	SURROGATE	%REC	Q	LIMITS
-	STL02255	13C3 HFPO-DA	76		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12100.d

Lims ID: 280-106036-C-13-A

Client ID: FAY-D-6731BUTLE-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:39:21 ALS Bottle#: 20 Worklist Smp#: 67

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-13-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.988	1.045	-0.057	1.000	565549	7.58	1332	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.988	1.045	-0.057		565549	10.0	1332	

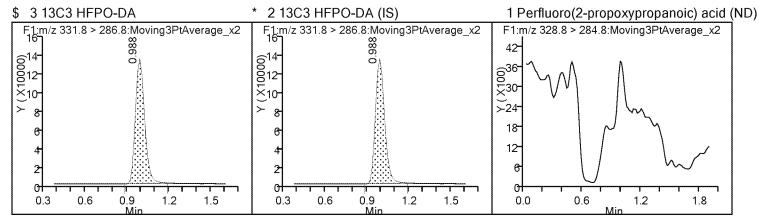
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12100.d

Client ID: FAY-D-6731BUTLE-W1-1-020118

Operator ID: JBH ALS Bottle#: 20 Worklist Smp#: 67

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12100.d

Lims ID: 280-106036-C-13-A

Client ID: FAY-D-6731BUTLE-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:39:21 ALS Bottle#: 20 Worklist Smp#: 67

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-13-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.58	75.75

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6731BUTLE-W1-2-0201 Lab Sample ID: 280-106036-14 18 Lab File ID: hfpo718B12101.d Matrix: Water Date Collected: 02/01/2018 08:26 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 289.4(mL) Date Analyzed: 02/12/2018 15:42 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	77		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12101.d

Lims ID: 280-106036-B-14-A

Client ID: FAY-D-6731BUTLE-W1-2-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:42:36 ALS Bottle#: 21 Worklist Smp#: 68

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-14-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFP0	D-DA							
331.8 > 286.8	0.947	1.045	-0.098	1.000	578491	7.75	1546	
* 2 13C3 HFPC	D-DA (IS)							
331.8 > 286.8	0.947	1.045	-0.098		578491	10.0	1546	

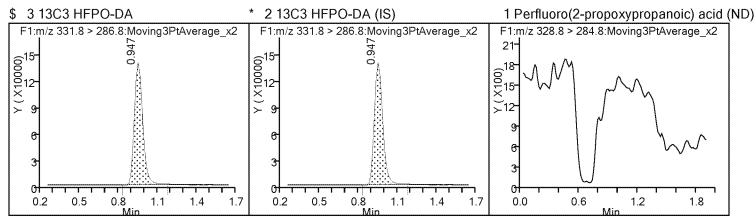
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12101.d

Client ID: FAY-D-6731BUTLE-W1-2-020118

Operator ID: JBH ALS Bottle#: 21 Worklist Smp#: 68

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12101.d

Lims ID: 280-106036-B-14-A

Client ID: FAY-D-6731BUTLE-W1-2-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:42:36 ALS Bottle#: 21 Worklist Smp#: 68

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-14-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.75	77.48

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6815BUTLE-W1-1-0201 Lab Sample ID: 280-106036-15 18 Lab File ID: hfpo718B12102.d Matrix: Water Date Collected: 02/01/2018 08:53 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 272.2(mL) Date Analyzed: 02/12/2018 15:45 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

	CAS NO.	COMPOUND NAME	RESULT	Q	RL	
r	13252-13-6	HFPO-DA	0.021		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	83		50-200

TestAmerica Denver

**Target Compound Quantitation Report** 

Data File: \ChromNA\Denver\ChromData\LC LCMS7\20180212-67162.b\hfpo718B12102.d

Lims ID: 280-106036-A-15-A

Client ID: FAY-D-6815BUTLE-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:45:52 ALS Bottle#: 22 Worklist Smp#: 69

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-15-A

Misc. Info.: HFPO18B12

Operator ID: **JBH** Instrument ID: LC LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: 

Date:

13-Feb-2018 07:48:24

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera

**EXP** DLT REL Amount Signal RT RT RT RT Response ug/l S/N Flags \$ 3 13C3 HFPO-DA 1296

331.8 > 286.8 0.947 1.045 -0.098 1.000 622819 8.34

\* 2 13C3 HFPO-DA (IS)

1296 331.8 > 286.8 0.947 1.045 -0.098 622819 10.0

1 Perfluoro(2-propoxypropanoic) acid

1.056 -0.109 328.8 > 284.8 0.947 1.000 78323 1.15 17.8

TestAmerica Denver

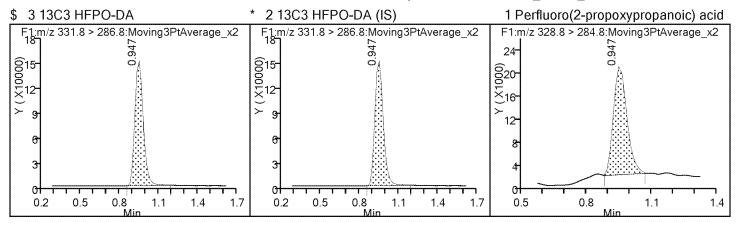
Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12102.d

Injection Date: 12-Feb-2018 15:45:52 Instrument ID: LC\_LCMS7
Lims ID: 280-106036-A-15-A Lab Sample ID: 280-106036-15

Client ID: FAY-D-6815BUTLE-W1-1-020118

Operator ID: JBH ALS Bottle#: 22 Worklist Smp#: 69

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12102.d

Lims ID: 280-106036-A-15-A

Client ID: FAY-D-6815BUTLE-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:45:52 ALS Bottle#: 22 Worklist Smp#: 69

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-15-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.34	83.42

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6893BUTLE-W1-1-0201 Lab Sample ID: 280-106036-16 18 Lab File ID: hfpo718B12103.d Matrix: Water Date Collected: 02/01/2018 09:44 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 287.5(mL) Date Analyzed: 02/12/2018 15:49 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.042		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	77		50-200

TestAmerica Denver

**Target Compound Quantitation Report** 

Data File: \ChromNA\Denver\ChromData\LC LCMS7\20180212-67162.b\hfpo718B12103.d

Lims ID: 280-106036-C-16-A

Client ID: FAY-D-6893BUTLE-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:49:07 ALS Bottle#: 23 Worklist Smp#: 70

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-16-A

Misc. Info.: HFPO18B12

Operator ID: **JBH** Instrument ID: LC LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: 

Date:

13-Feb-2018 07:48:28

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera

**EXP** DLT REL Amount Signal RT RT RT RT Response ug/l S/N Flags \$ 3 13C3 HFPO-DA 331.8 > 286.8 0.934 1.045 -0.111 1.000 574225 7.69 1617

\* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.934 1.045 -0.111 574225 10.0 1617

1 Perfluoro(2-propoxypropanoic) acid

1.056 -0.109 32.6 328.8 > 284.8 0.947 1.000 150879 2.44

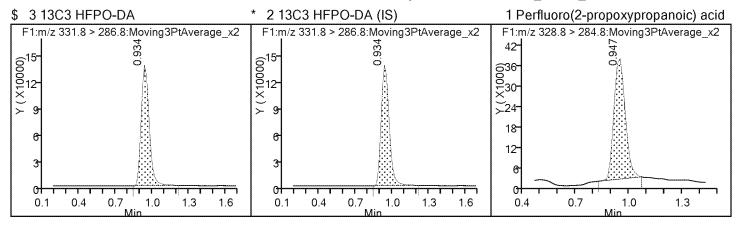
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12103.d

Client ID: FAY-D-6893BUTLE-W1-1-020118

Operator ID: JBH ALS Bottle#: 23 Worklist Smp#: 70

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12103.d

Lims ID: 280-106036-C-16-A

Client ID: FAY-D-6893BUTLE-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:49:07 ALS Bottle#: 23 Worklist Smp#: 70

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-16-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.69	76.91

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-5018MRSHR-W1-1-0201 Lab Sample ID: 280-106036-17 18 Lab File ID: hfpo718B12104.d Matrix: Water Date Collected: 02/01/2018 11:13 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 292.2(mL) Date Analyzed: 02/12/2018 15:52 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.031		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	69		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12104.d

Lims ID: 280-106036-B-17-A

Client ID: FAY-D-5018MRSHR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:52:22 ALS Bottle#: 24 Worklist Smp#: 71

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-17-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPC	)-DA								
331.8 > 286.8	0.934	1.045	-0.111	1.000	514039	6.89	1210		
* 2 13C3 HFPC	-DA (IS)								
331.8 > 286.8	0.934	1.045	-0.111		514039	10.0	1210		
1 Perfluoro(2-propoxypropanoic) acid									
328.8 > 284.8	0.947	1.056	-0.109	1.000	102109	1.83	26.3		

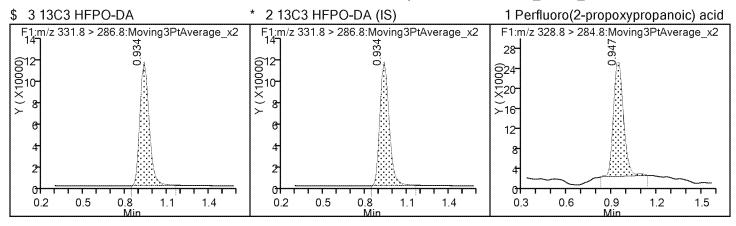
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12104.d

Client ID: FAY-D-5018MRSHR-W1-1-020118

Operator ID: JBH ALS Bottle#: 24 Worklist Smp#: 71

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12104.d

Lims ID: 280-106036-B-17-A

Client ID: FAY-D-5018MRSHR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:52:22 ALS Bottle#: 24 Worklist Smp#: 71

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-17-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	6.89	68.85

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-5018MRSHR-W1-2-0201 Lab Sample ID: 280-106036-18 18 Lab File ID: hfpo718B12105.d Matrix: Water Date Collected: 02/01/2018 11:13 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 293.3(mL) Date Analyzed: 02/12/2018 15:55 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

	CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13:	252-13-6	HFPO-DA	0.023		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	73		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12105.d

Lims ID: 280-106036-A-18-A

Client ID: FAY-D-5018MRSHR-W1-2-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:55:37 ALS Bottle#: 25 Worklist Smp#: 72

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-18-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

		,				-		
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFP0	D-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	543174	7.28	1363	
* 2 13C3 HFPC	D-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		543174	10.0	1363	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	81216	1.37	22.1	

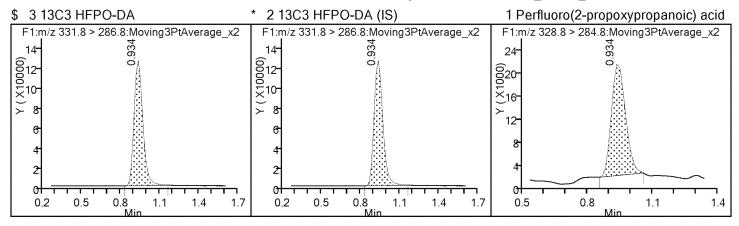
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12105.d

Client ID: FAY-D-5018MRSHR-W1-2-020118

Operator ID: JBH ALS Bottle#: 25 Worklist Smp#: 72

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12105.d

Lims ID: 280-106036-A-18-A

Client ID: FAY-D-5018MRSHR-W1-2-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 15:55:37 ALS Bottle#: 25 Worklist Smp#: 72

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-18-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.28	72.75

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-5021MRSHR-W1-1-0201 Lab Sample ID: 280-106036-19 18 Lab File ID: hfpo718B12111.d Matrix: Water Date Collected: 02/01/2018 11:44 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 19:22 Sample wt/vol: 296.6(mL) Date Analyzed: 02/12/2018 16:15 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404643 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.015		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	67		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12111.d

Lims ID: 280-106036-C-19-A

Client ID: FAY-D-5021MRSHR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 16:15:12 ALS Bottle#: 30 Worklist Smp#: 78

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-19-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:34

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	499214	6.69	1720	
* 2 13C3 HFPO-DA (IS)								
331.8 > 286.8	0.920	1.045	-0.125		499214	10.0	1720	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					M
328.8 > 284.8	0.934	1.056	-0.122	1.000	48730	0.8836	9.1	M

#### QC Flag Legend

Review Flags

M - Manually Integrated

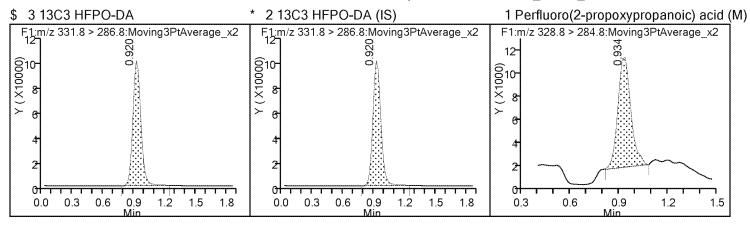
TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12111.d

Client ID: FAY-D-5021MRSHR-W1-1-020118

Operator ID: JBH ALS Bottle#: 30 Worklist Smp#: 78

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12111.d

Lims ID: 280-106036-C-19-A

Client ID: FAY-D-5021MRSHR-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 16:15:12 ALS Bottle#: 30 Worklist Smp#: 78

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-19-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	6.69	66.87

Report Date: 13-Feb-2018 07:56:37 Chrom Revision: 2.2 08-Feb-2018 13:38:42 Manual Integration/User Assign Peak Report

#### TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12111.d

Injection Date: 12-Feb-2018 16:15:12 Instrument ID: LC LCMS7 280-106036-19 Lims ID: 280-106036-C-19-A Lab Sample ID:

Client ID: FAY-D-5021MRSHR-W1-1-020118

Operator ID: ALS Bottle#: 30 78 **JBH** Worklist Smp#:

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: **HFPO** Limit Group: LC - 8321A\_HFPO\_Du

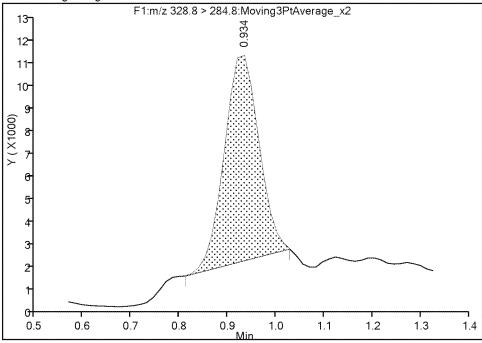
Column: Detector F1:MRM

#### 1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

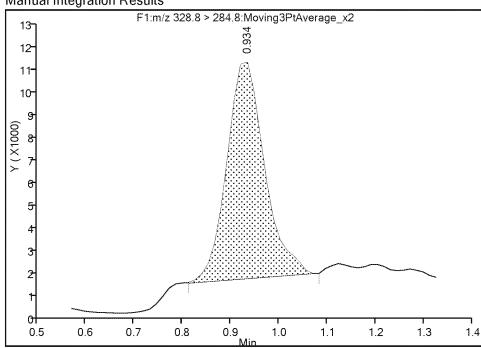
RT: 0.93 Area: 42403 Amount: 0.764491 Amount Units: ug/l

Processing Integration Results



RT: 0.93 Area: 48730 Amount: 0.883630 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 13-Feb-2018 07:49:32

Audit Action: Manually Integrated

Audit Reason: Baseline

Page 284 of 711

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-5021MRSHR-W1-2-0201 Lab Sample ID: 280-106036-20 18 Lab File ID: hfpo718B12112.d Matrix: Water Date Collected: 02/01/2018 11:48 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 19:22 Sample wt/vol: 288.6(mL) Date Analyzed: 02/12/2018 16:18 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup:(Y/N) N Analysis Batch No.: 404643 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

	CAS NO.	SURROGATE	%REC	Q	LIMITS
-	STL02255	13C3 HFPO-DA	76		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12112.d

Lims ID: 280-106036-D-20-A

Client ID: FAY-D-5021MRSHR-W1-2-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 16:18:27 ALS Bottle#: 31 Worklist Smp#: 79

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-20-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Column 1: Det: F1:MRM

Process Host: XAWRK025

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPO-DA									
331.8 > 286.8	0.920	1.045	-0.125	1.000	564612	7.56	1306		
* 2 13C3 HFPO-DA (IS)									
331.8 > 286.8	0.920	1.045	-0.125		564612	10.0	1306		

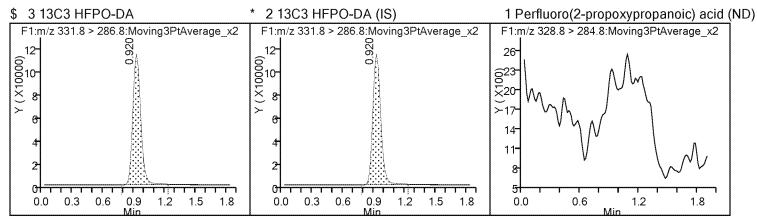
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12112.d

Client ID: FAY-D-5021MRSHR-W1-2-020118

Operator ID: JBH ALS Bottle#: 31 Worklist Smp#: 79

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: 

Lims ID: 280-106036-D-20-A

Client ID: FAY-D-5021MRSHR-W1-2-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 16:18:27 ALS Bottle#: 31 Worklist Smp#: 79

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-20-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration Last ICal File:

Column 1: Det: F1:MRM

Process Host: XAWRK025

Date: 13-Feb-2018 07:49:47 First Level Reviewer: meyera

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.56	75.62

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-4065SPNSH-W1-1-0201 Lab Sample ID: 280-106036-21 18 Lab File ID: hfpo718B12113.d Matrix: Water Date Collected: 02/01/2018 13:51 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 19:22 Sample wt/vol: 298.3(mL) Date Analyzed: 02/12/2018 16:21 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup:(Y/N) N Analysis Batch No.: 404643 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.037		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	67		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12113.d

Lims ID: 280-106036-D-21-A

Client ID: FAY-D-4065SPNSH-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 16:21:44 ALS Bottle#: 32 Worklist Smp#: 80

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-21-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:49

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC								
331.8 > 286.8	0.920	1.045	-0.125	1.000	503357	6.74	1234	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		503357	10.0	1234	
1 Perfluoro(2-p	oropoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	119081	2.19	20.8	

TestAmerica Denver

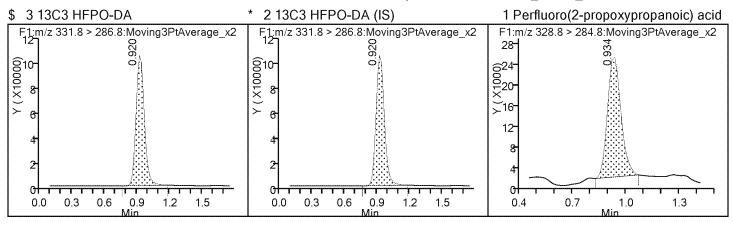
Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12113.d

Injection Date: 12-Feb-2018 16:21:44 Instrument ID: LC\_LCMS7 Lims ID: 280-106036-D-21-A Lab Sample ID: 280-106036-21

Client ID: FAY-D-4065SPNSH-W1-1-020118

Operator ID: JBH ALS Bottle#: 32 Worklist Smp#: 80

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12113.d

Lims ID: 280-106036-D-21-A

Client ID: FAY-D-4065SPNSH-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 16:21:44 ALS Bottle#: 32 Worklist Smp#: 80

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-21-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:49

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	6.74	67.42

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-4065SPNSH-W1-2-0201 Lab Sample ID: 280-106036-22 18 Lab File ID: hfpo718B12114.d Matrix: Water Date Collected: 02/01/2018 13:55 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 19:22 Sample wt/vol: 274.7(mL) Date Analyzed: 02/12/2018 16:25 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup:(Y/N) N Analysis Batch No.: 404643 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.029		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	78		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12114.d

Lims ID: 280-106036-A-22-A

Client ID: FAY-D-4065SPNSH-W1-2-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 16:25:00 ALS Bottle#: 33 Worklist Smp#: 81

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-22-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:51

		,				-		
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HF	PO-DA							
331.8 > 286.8	8 0.920	1.045	-0.125	1.000	583071	7.81	1330	
* 2 13C3 HF	PO-DA (IS)							
331.8 > 286.8	8 0.920	1.045	-0.125		583071	10.0	1330	
1 Perfluoro	(2-propoxyp	ropanoi	c) acid					
328.8 > 284.8	8 0.934	1.056	-0.122	1.000	102617	1.62	19.5	

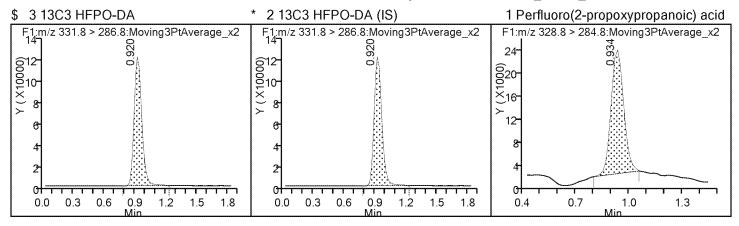
TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12114.d

Client ID: FAY-D-4065SPNSH-W1-2-020118

Operator ID: JBH ALS Bottle#: 33 Worklist Smp#: 81

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12114.d

Lims ID: 280-106036-A-22-A

Client ID: FAY-D-4065SPNSH-W1-2-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 16:25:00 ALS Bottle#: 33 Worklist Smp#: 81

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-22-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:51

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.81	78.10

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-4057SPNSH-W1-1-0201 Lab Sample ID: 280-106036-23 18 Lab File ID: hfpo718B12140.d Matrix: Water Date Collected: 02/01/2018 14:34 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 19:44 Sample wt/vol: 278.7(mL) Date Analyzed: 02/12/2018 17:49 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404644 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.026		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	75		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \ChromNA\Denver\ChromData\LC LCMS7\20180212-67162.b\hfpo718B12140.d

Lims ID: 280-106036-A-23-A

Client ID: FAY-D-4059SPNSH-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 17:49:55 ALS Bottle#: 19 Worklist Smp#: 107

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-23-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:08 **EXP** DLT REL Amount Signal RT RT RT RT Response ug/l S/N Flags \$ 3 13C3 HFPO-DA 331.8 > 286.8 0.920 1.045 -0.125 1.000 560896 7.51 1057 \* 2 13C3 HFPO-DA (IS) 331.8 > 286.8 0.920 1.045 -0.125 560896 10.0 1057

TestAmerica Denver

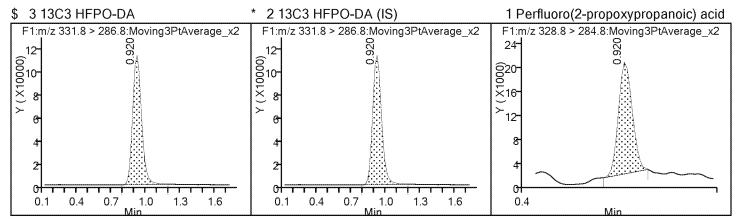
Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12140.d

Injection Date: 12-Feb-2018 17:49:55 Instrument ID: LC\_LCMS7
Lims ID: 280-106036-A-23-A Lab Sample ID: 280-106036-23

Client ID: FAY-D-4059SPNSH-W1-1-020118

Operator ID: JBH ALS Bottle#: 19 Worklist Smp#: 107

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12140.d

Lims ID: 280-106036-A-23-A

Client ID: FAY-D-4059SPNSH-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 17:49:55 ALS Bottle#: 19 Worklist Smp#: 107

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-23-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:08

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.51	75.13

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-7265NC87H-W1-1-0201 Lab Sample ID: 280-106036-24 18 Lab File ID: hfpo718B12141.d Matrix: Water Date Collected: 02/01/2018 09:26 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 19:44 Sample wt/vol: 285.2(mL) Date Analyzed: 02/12/2018 17:53 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404644 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.026		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	68		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12141.d

Lims ID: 280-106036-A-24-A

Client ID: FAY-D-7265NC87H-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 17:53:10 ALS Bottle#: 20 Worklist Smp#: 108

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-24-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:23

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.907	1.045	-0.138	1.000	507637	6.80	893	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.907	1.045	-0.138		507637	10.0	893	
1 Perfluoro(2- <sub>l</sub>	propoxyp	ropanoi	c) acid					M
328.8 > 284.8	0.920	1.056	-0.136	1.000	81824	1.48	9.0	М

### QC Flag Legend

Review Flags

M - Manually Integrated

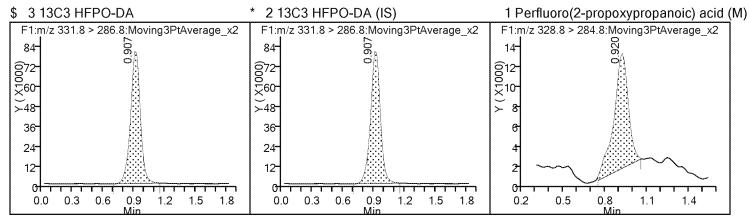
TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12141.d

Client ID: FAY-D-7265NC87H-W1-1-020118

Operator ID: JBH ALS Bottle#: 20 Worklist Smp#: 108

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12141.d

Lims ID: 280-106036-A-24-A

Client ID: FAY-D-7265NC87H-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 17:53:10 ALS Bottle#: 20 Worklist Smp#: 108

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-24-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	6.80	67.99

Report Date: 13-Feb-2018 07:56:53

Chrom Revision: 2.2 08-Feb-2018 13:38:42

Manual Integration/User Assign Peak Report

#### TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12141.d

Client ID: FAY-D-7265NC87H-W1-1-020118

Operator ID: JBH ALS Bottle#: 20 Worklist Smp#: 108

Injection Vol: 20.0 ul Dil. Factor: 1.0000

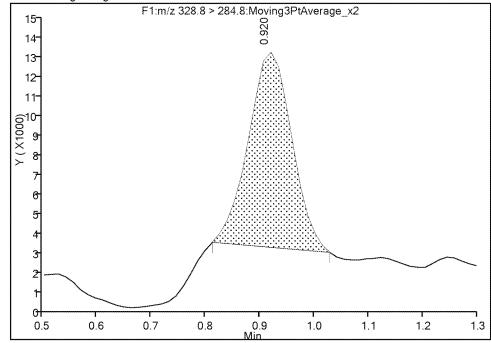
Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du

Column: Detector F1:MRM

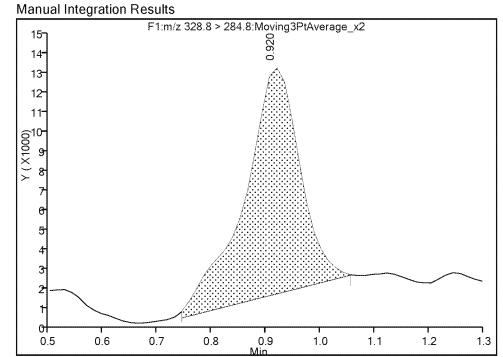
### 1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

RT: 0.92 Area: 54862 Amount: 0.981955 Amount Units: ug/l Processing Integration Results



RT: 0.92 Area: 81824 Amount: 1.481229 Amount Units: ug/l



Reviewer: meyera, 13-Feb-2018 07:52:18

Audit Action: Manually Integrated

Audit Reason: Baseline

Page 305 of 711

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-7394NC87H-W1-1-0201 Lab Sample ID: 280-106036-25 18 Lab File ID: hfpo718B12142.d Matrix: Water Date Collected: 02/01/2018 10:42 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 19:44 Sample wt/vol: 281.8(mL) Date Analyzed: 02/12/2018 17:56 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404644 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.048		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	87		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12142.d

Lims ID: 280-106036-C-25-A

Client ID: FAY-D-7394NC87H-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 17:56:25 ALS Bottle#: 21 Worklist Smp#: 109

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-25-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:25

		,							
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPC	)-DA								
331.8 > 286.8	0.920	1.045	-0.125	1.000	649873	8.70	1436		
* 2 13C3 HFPO	-DA (IS)								
331.8 > 286.8	0.920	1.045	-0.125		649873	10.0	1436		
1 Perfluoro(2-	oropoxyp	ropanoi	c) acid						
328.8 > 284.8	0.934	1.056	-0.122	1.000	189661	2.71	30.8		

TestAmerica Denver

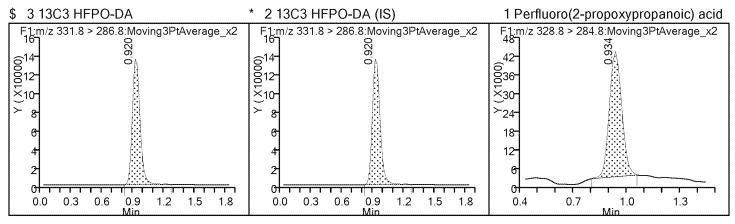
Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12142.d

Injection Date: 12-Feb-2018 17:56:25 Instrument ID: LC\_LCMS7 Lims ID: 280-106036-C-25-A Lab Sample ID: 280-106036-25

Client ID: FAY-D-7394NC87H-W1-1-020118

Operator ID: JBH ALS Bottle#: 21 Worklist Smp#: 109

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12142.d

Lims ID: 280-106036-C-25-A

Client ID: FAY-D-7394NC87H-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 17:56:25 ALS Bottle#: 21 Worklist Smp#: 109

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-25-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:25

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.70	87.04

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6711CHKFT-W1-1-0201 Lab Sample ID: 280-106036-26 18 Lab File ID: hfpo718B12143.d Matrix: Water Date Collected: 02/01/2018 11:52 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 19:44 Sample wt/vol: 290.1(mL) Date Analyzed: 02/12/2018 17:59 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404644 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.083		0.010	

	CAS NO.	SURROGATE	%REC	Q	LIMITS
-	STL02255	13C3 HFPO-DA	76		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12143.d

Lims ID: 280-106036-A-26-A

Client ID: FAY-D-6711CHKFT-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 17:59:40 ALS Bottle#: 22 Worklist Smp#: 110

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-26-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:27

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.907	1.045	-0.138	1.000	571004	7.65	1019	
* 2 13C3 HFPC	-DA (IS)							
331.8 > 286.8	0.907	1.045	-0.138		571004	10.0	1019	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.920	1.056	-0.136	1.000	294370	4.81	38.2	

TestAmerica Denver

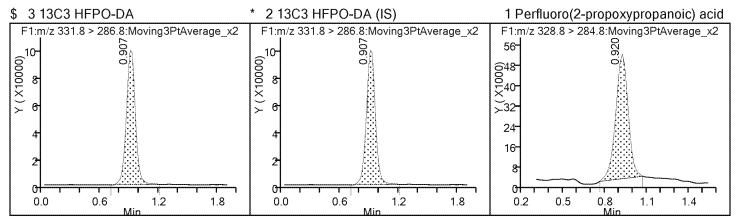
Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12143.d

Injection Date: 12-Feb-2018 17:59:40 Instrument ID: LC\_LCMS7 Lims ID: 280-106036-A-26-A Lab Sample ID: 280-106036-26

Client ID: FAY-D-6711CHKFT-W1-1-020118

Operator ID: JBH ALS Bottle#: 22 Worklist Smp#: 110

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12143.d

Lims ID: 280-106036-A-26-A

Client ID: FAY-D-6711CHKFT-W1-1-020118

Sample Type: Client

Inject. Date: 12-Feb-2018 17:59:40 ALS Bottle#: 22 Worklist Smp#: 110

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-26-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:27

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.65	76.48

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6416CHKFT-W1-1-0201 Lab Sample ID: 280-106036-27 18 Lab File ID: hfpo718B14012.d Matrix: Water Date Collected: 02/01/2018 12:04 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 296.5(mL) Date Analyzed: 02/14/2018 08:16 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.052		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	78		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14012.d

Lims ID: 280-106036-D-27-A

Client ID: FAY-D-6916CHKFT-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:16:59 ALS Bottle#: 19 Worklist Smp#: 12

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-27-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:39

		,				-			
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPC	)-DA								
331.8 > 286.8	0.947	1.045	-0.098	1.000	585048	7.84	1802		
* 2 13C3 HFPO	-DA (IS)								
331.8 > 286.8	0.947	1.045	-0.098		585048	10.0	1802		
1 Perfluoro(2-propoxypropanoic) acid									
328.8 > 284.8	0.947	1.056	-0.109	1.000	194936	3.10	61.4		

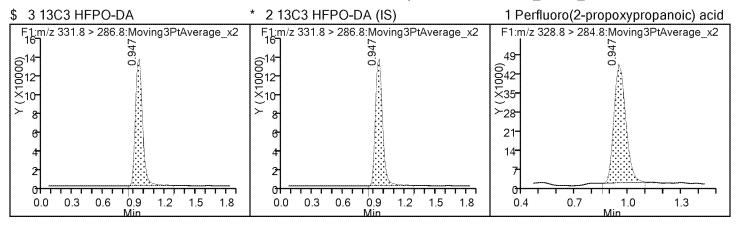
TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14012.d

Client ID: FAY-D-6916CHKFT-W1-1-020118

Operator ID: JBH ALS Bottle#: 19 Worklist Smp#: 12

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14012.d

Lims ID: 280-106036-D-27-A

Client ID: FAY-D-6916CHKFT-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:16:59 ALS Bottle#: 19 Worklist Smp#: 12

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-27-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:39

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.84	78.36

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6591BUTLE-W1-1-0201 Lab Sample ID: 280-106036-28 18 Lab File ID: hfpo718B14013.d Matrix: Water Date Collected: 02/01/2018 14:38 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 293.3(mL) Date Analyzed: 02/14/2018 08:20 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.016		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	77		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14013.d

Lims ID: 280-106036-A-28-A

Client ID: FAY-D-6591BUTLE-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:20:14 ALS Bottle#: 20 Worklist Smp#: 13

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-28-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:41

		,				-				
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags		
\$ 3 13C3 HFPC	)-DA									
331.8 > 286.8	0.920	1.045	-0.125	1.000	577961	7.74	1108			
* 2 13C3 HFPO	-DA (IS)									
331.8 > 286.8	0.920	1.045	-0.125		577961	10.0	1108			
1 Perfluoro(2-propoxypropanoic) acid										
328.8 > 284.8	0.920	1.056	-0.136	1.000	58274	0.9138	15.9			

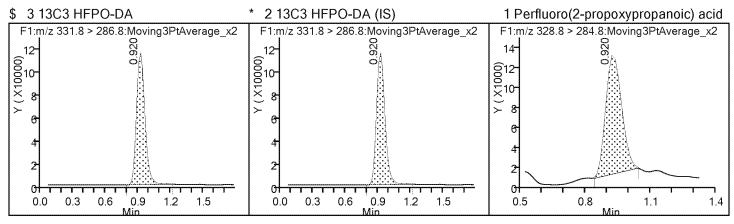
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14013.d

Client ID: FAY-D-6591BUTLE-W1-1-020118

Operator ID: JBH ALS Bottle#: 20 Worklist Smp#: 13

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14013.d

Lims ID: 280-106036-A-28-A

Client ID: FAY-D-6591BUTLE-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:20:14 ALS Bottle#: 20 Worklist Smp#: 13

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-28-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:41

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.74	77.41

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-7149BUTLE-W1-1-0201 Lab Sample ID: 280-106036-29 18 Lab File ID: hfpo718B14014.d Matrix: Water Date Collected: 02/01/2018 15:03 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 286.2(mL) Date Analyzed: 02/14/2018 08:23 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.061		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	82		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14014.d

Lims ID: 280-106036-D-29-A

Client ID: FAY-D-7149BUTLE-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:23:28 ALS Bottle#: 21 Worklist Smp#: 14

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-29-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:43

		,								
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags		
\$ 3 13C3 HFPC	D-DA									
331.8 > 286.8	0.934	1.045	-0.111	1.000	609648	8.17	1335			
* 2 13C3 HFPC	D-DA (IS)									
331.8 > 286.8	0.934	1.045	-0.111		609648	10.0	1335			
1 Perfluoro(2-propoxypropanoic) acid										
328.8 > 284.8	0.934	1.056	-0.122	1.000	228924	3.50	70.2			

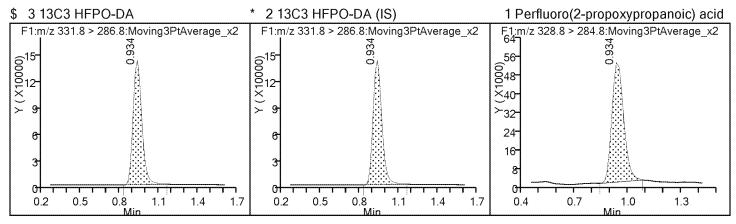
TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14014.d

Client ID: FAY-D-7149BUTLE-W1-1-020118

Operator ID: JBH ALS Bottle#: 21 Worklist Smp#: 14

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14014.d

Lims ID: 280-106036-D-29-A

Client ID: FAY-D-7149BUTLE-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:23:28 ALS Bottle#: 21 Worklist Smp#: 14

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-29-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.17	81.66

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-7243BUTLE-W1-1-0201 Lab Sample ID: 280-106036-30 18 Lab File ID: hfpo718B14015.d Matrix: Water Date Collected: 02/01/2018 17:11 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 287.8(mL) Date Analyzed: 02/14/2018 08:26 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.089		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	85		50-200

TestAmerica Denver

**Target Compound Quantitation Report** 

Data File: 

Lims ID: 280-106036-A-30-A

Client ID: FAY-D-7243BUTLE-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:26:43 ALS Bottle#: 22 Worklist Smp#: 15

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-30-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: 

Date:

15-Feb-2018 06:51:45

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
3 13C3 HFPC 31.8 > 286.8	)-DA 0.934	1.045	-0.111	1.000	636104	8.52	1266	
2 13C3 HFPO 31.8 > 286.8	-DA (IS) 0.934	1.045	-0.111		636104	10.0	1266	
1 Perfluoro(2- <sub>1</sub> 28.8 > 284.8	oropoxyp 0.947	ropanoi 1.056	c) acid -0.109	1.000	347610	5.10	92.4	

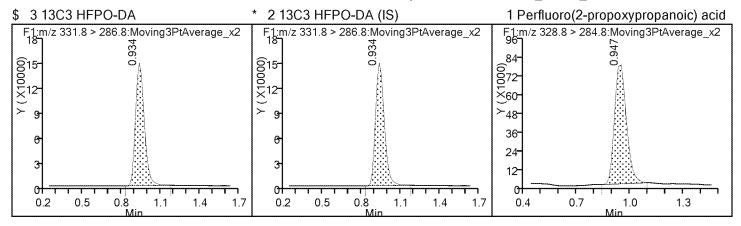
TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14015.d

Client ID: FAY-D-7243BUTLE-W1-1-020118

Operator ID: JBH ALS Bottle#: 22 Worklist Smp#: 15

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14015.d

Lims ID: 280-106036-A-30-A

Client ID: FAY-D-7243BUTLE-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:26:43 ALS Bottle#: 22 Worklist Smp#: 15

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-30-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.52	85.20

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-5049MATTH-W1-1-0201 Lab Sample ID: 280-106036-31 18-D Lab File ID: hfpo718B14016.d Matrix: Water Date Collected: 02/01/2018 13:48 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 274.8(mL) Date Analyzed: 02/14/2018 08:30 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.12		0.010	

	CAS NO.	SURROGATE	%REC	Q	LIMITS
S	TL02255	13C3 HFPO-DA	75		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14016.d

Lims ID: 280-106036-B-31-A

Client ID: FAY-D-5049MATTH-W1-1-020118-D

Sample Type: Client

Inject. Date: 14-Feb-2018 08:30:01 ALS Bottle#: 23 Worklist Smp#: 16

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-31-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

		,				-			
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPC	)-DA								
331.8 > 286.8	0.920	1.045	-0.125	1.000	562941	7.54	1140		
* 2 13C3 HFPO	-DA (IS)								
331.8 > 286.8	0.920	1.045	-0.125		562941	10.0	1140		
1 Perfluoro(2- <sub>l</sub>	propoxyp	ropanoi	c) acid						
328.8 > 284.8	0.934	1.056	-0.122	1.000	391463	6.50	107		

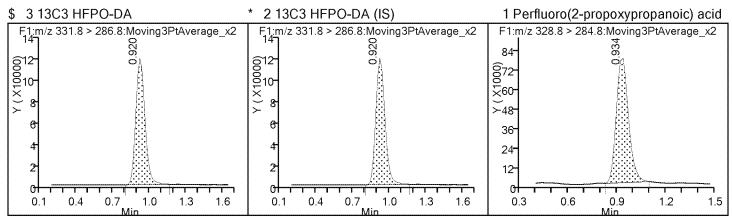
TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14016.d

Client ID: FAY-D-5049MATTH-W1-1-020118-D

Operator ID: JBH ALS Bottle#: 23 Worklist Smp#: 16

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14016.d

Lims ID: 280-106036-B-31-A

Client ID: FAY-D-5049MATTH-W1-1-020118-D

Sample Type: Client

Inject. Date: 14-Feb-2018 08:30:01 ALS Bottle#: 23 Worklist Smp#: 16

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-31-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.54	75.40

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-7609TABOR-W1-1-0201 Lab Sample ID: 280-106036-32 18 Lab File ID: hfpo718B14017.d Matrix: Water Date Collected: 02/01/2018 14:41 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 277.2(mL) Date Analyzed: 02/14/2018 08:33 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.15		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	71		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14017.d

Lims ID: 280-106036-B-32-A

Client ID: FAY-D-7609TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:33:16 ALS Bottle#: 24 Worklist Smp#: 17

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-32-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	528296	7.08	955	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		528296	10.0	955	
1 Perfluoro(2- <sub>l</sub>	oropoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	476566	8.45	147	

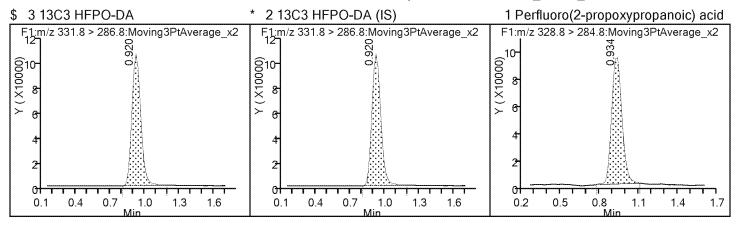
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14017.d

Client ID: FAY-D-7609TABOR-W1-1-020118

Operator ID: JBH ALS Bottle#: 24 Worklist Smp#: 17

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14017.d

Lims ID: 280-106036-B-32-A

Client ID: FAY-D-7609TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:33:16 ALS Bottle#: 24 Worklist Smp#: 17

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-32-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.08	70.76

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-7741TABOR-W1-1-0201 Lab Sample ID: 280-106036-33 18 Lab File ID: hfpo718B14019.d Matrix: Water Date Collected: 02/01/2018 15:08 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 272.3(mL) Date Analyzed: 02/14/2018 08:39 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.10		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	81		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14019.d

Lims ID: 280-106036-C-33-A

Client ID: FAY-D-7741TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:39:45 ALS Bottle#: 25 Worklist Smp#: 19

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-33-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

			,				-		
	Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
,	\$ 3 13C3 HFPC	)-DA							
	331.8 > 286.8	0.975	1.045	-0.070	1.000	607823	8.14	1448	
,	* 2 13C3 HFPO	-DA (IS)							
	331.8 > 286.8	0.975	1.045	-0.070		607823	10.0	1448	
	1 Perfluoro(2-p	oropoxyp	ropanoi	c) acid					
	328.8 > 284.8	0.988	1.056	-0.068	1.000	355617	5.47	72.8	

TestAmerica Denver

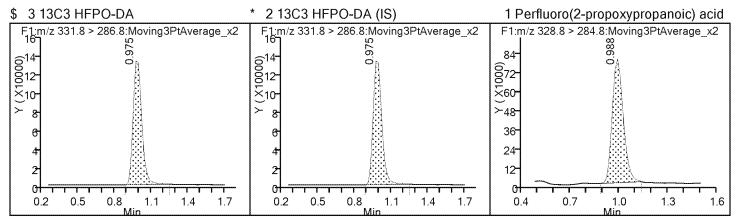
Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14019.d

Injection Date: 14-Feb-2018 08:39:45 Instrument ID: LC\_LCMS7 Lims ID: 280-106036-C-33-A Lab Sample ID: 280-106036-33

Client ID: FAY-D-7741TABOR-W1-1-020118

Operator ID: JBH ALS Bottle#: 25 Worklist Smp#: 19

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14019.d

Lims ID: 280-106036-C-33-A

Client ID: FAY-D-7741TABOR-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:39:45 ALS Bottle#: 25 Worklist Smp#: 19

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-33-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.14	81.41

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Client Sample ID: FAY-D-FB-020118-B Lab Sample ID: 280-106036-34

Matrix: Water Lab File ID: hfpo718B14020.d

Analysis Method: 8321A Date Collected: 02/01/2018 17:00

Extraction Method: 3535 Date Extracted: 02/13/2018 11:30

Sample wt/vol: 288.8(mL) Date Analyzed: 02/14/2018 08:43

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: Synergi Hydro ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	82		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14020.d

Lims ID: 280-106036-A-34-A Client ID: FAY-D-FB-020118-B

Sample Type: Client

Inject. Date: 14-Feb-2018 08:43:00 ALS Bottle#: 26 Worklist Smp#: 20

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-34-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFP0	D-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	615420	8.24	1447	
* 2 13C3 HFPC	D-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		615420	10.0	1447	

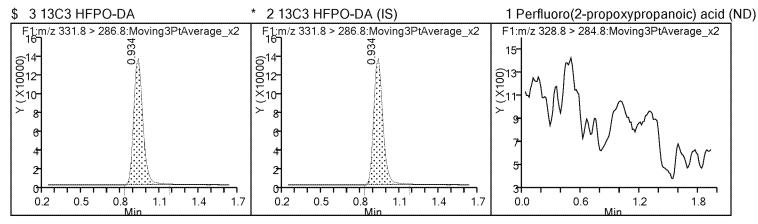
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14020.d

Client ID: FAY-D-FB-020118-B

Operator ID: JBH ALS Bottle#: 26 Worklist Smp#: 20

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14020.d

Lims ID: 280-106036-A-34-A Client ID: FAY-D-FB-020118-B

Sample Type: Client

Inject. Date: 14-Feb-2018 08:43:00 ALS Bottle#: 26 Worklist Smp#: 20

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-34-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.24	82.43

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Client Sample ID: FAY-D-47MAUDI-W1-1-020118 Lab Sample ID: 280-106036-35

Matrix: Water Lab File ID: hfpo718B14021.d

Analysis Method: 8321A Date Collected: 02/01/2018 09:00

Extraction Method: 3535 Date Extracted: 02/13/2018 11:30

Sample wt/vol: 271.7(mL) Date Analyzed: 02/14/2018 08:46

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: Synergi Hydro ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.016		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	82		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14021.d

Lims ID: 280-106036-A-35-A

Client ID: FAY-D-47MAUDI-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:46:16 ALS Bottle#: 27 Worklist Smp#: 21

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-35-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	611690	8.19	1546	
* 2 13C3 HFPO-DA (IS)								
331.8 > 286.8	0.934	1.045	-0.111		611690	10.0	1546	
1 Perfluoro(2-	oropoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	59198	0.8758	19.5	

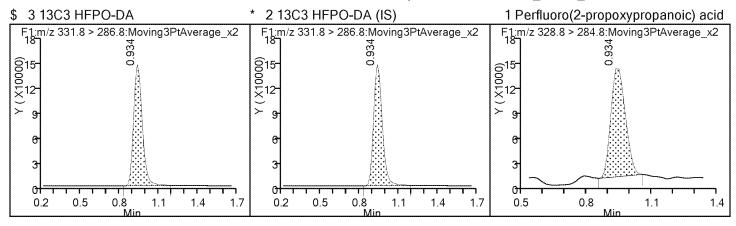
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14021.d

Client ID: FAY-D-47MAUDI-W1-1-020118

Operator ID: JBH ALS Bottle#: 27 Worklist Smp#: 21

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14021.d

Lims ID: 280-106036-A-35-A

Client ID: FAY-D-47MAUDI-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:46:16 ALS Bottle#: 27 Worklist Smp#: 21

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-35-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.19	81.93

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Client Sample ID: FAY-D-47MAUDI-W1-2-020118 Lab Sample ID: 280-106036-36

Matrix: Water Lab File ID: hfpo718B14022.d

Analysis Method: 8321A Date Collected: 02/01/2018 09:05

Extraction Method: 3535 Date Extracted: 02/13/2018 11:30

Sample wt/vol: 276.5(mL) Date Analyzed: 02/14/2018 08:49

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: Synergi Hydro ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.015		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	81		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14022.d

Lims ID: 280-106036-C-36-A

Client ID: FAY-D-47MAUDI-W1-2-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:49:31 ALS Bottle#: 28 Worklist Smp#: 22

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-36-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	605511	8.11	1753	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		605511	10.0	1753	
1 Perfluoro(2-	oropoxyp	ropanoi	c) acid					
328.8 > 284.8	0.947	1.056	-0.109	1.000	57094	0.8524	17.4	

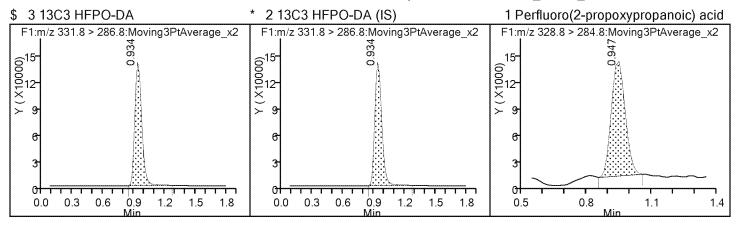
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14022.d

Client ID: FAY-D-47MAUDI-W1-2-020118

Operator ID: JBH ALS Bottle#: 28 Worklist Smp#: 22

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14022.d

Lims ID: 280-106036-C-36-A

Client ID: FAY-D-47MAUDI-W1-2-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:49:31 ALS Bottle#: 28 Worklist Smp#: 22

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-36-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.11	81.10

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-1123NC20H-W1-1-0201 Lab Sample ID: 280-106036-37 18 Lab File ID: hfpo718B14023.d Matrix: Water Date Collected: 02/01/2018 09:43 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 281.3(mL) Date Analyzed: 02/14/2018 08:52 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.018		0.010	

	CAS NO.	SURROGATE	%REC	Q	LIMITS
F	STL02255	13C3 HFPO-DA	75		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14023.d

Lims ID: 280-106036-A-37-A

Client ID: FAY-D-1123NC20H-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:52:47 ALS Bottle#: 29 Worklist Smp#: 23

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-37-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.947	1.045	-0.098	1.000	561244	7.52	1925	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.947	1.045	-0.098		561244	10.0	1925	
1 Perfluoro(2- <sub>l</sub>	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.947	1.056	-0.109	1.000	63350	1.03	22.8	

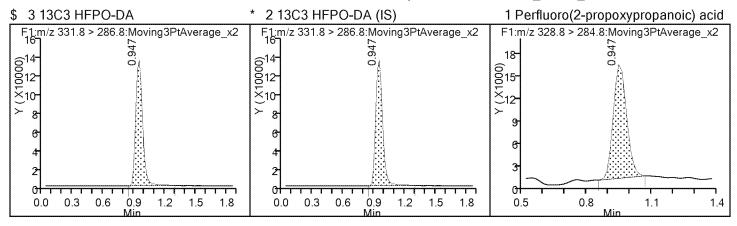
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14023.d

Client ID: FAY-D-1123NC20H-W1-1-020118

Operator ID: JBH ALS Bottle#: 29 Worklist Smp#: 23

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14023.d

Lims ID: 280-106036-A-37-A

Client ID: FAY-D-1123NC20H-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:52:47 ALS Bottle#: 29 Worklist Smp#: 23

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-37-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.52	75.17

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-3322DANDE-W1-1-0201 Lab Sample ID: 280-106036-38 18 Lab File ID: hfpo718B14024.d Matrix: Water Date Collected: 02/01/2018 16:30 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 288.9(mL) Date Analyzed: 02/14/2018 08:56 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	82		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14024.d

Lims ID: 280-106036-A-38-A

Client ID: FAY-D-3322DANDE-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:56:03 ALS Bottle#: 30 Worklist Smp#: 24

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-38-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	611136	8.19	1537	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		611136	10.0	1537	

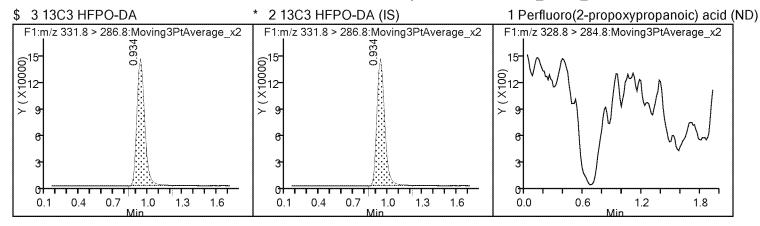
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14024.d

Client ID: FAY-D-3322DANDE-W1-1-020118

Operator ID: JBH ALS Bottle#: 30 Worklist Smp#: 24

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14024.d

Lims ID: 280-106036-A-38-A

Client ID: FAY-D-3322DANDE-W1-1-020118

Sample Type: Client

Inject. Date: 14-Feb-2018 08:56:03 ALS Bottle#: 30 Worklist Smp#: 24

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-A-38-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.19	81.86

## FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-3322DANDE-W1-1-0201 Lab Sample ID: 280-106036-39 18D Lab File ID: hfpo718B13087.d Matrix: Water Date Collected: 02/01/2018 16:30 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/12/2018 08:23 Sample wt/vol: 251.2(mL) Date Analyzed: 02/13/2018 12:39 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404879 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	113		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13087.d

Lims ID: 280-106036-C-39-A

Client ID: FAY-D-3322DANDE-W1-1-020118D

Sample Type: Client

Inject. Date: 13-Feb-2018 12:39:17 ALS Bottle#: 7 Worklist Smp#: 66

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-39-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPO-DA								
331.8 > 286.8	0.934	1.045	-0.111	1.000	841551	11.3	1427	
* 2 13C3 HFPO-DA (IS)								
331.8 > 286.8	0.934	1.045	-0.111		841551	10.0	1427	

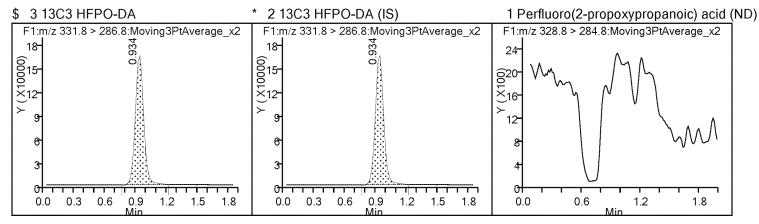
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13087.d

Client ID: FAY-D-3322DANDE-W1-1-020118D

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 66

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13087.d

Lims ID: 280-106036-C-39-A

Client ID: FAY-D-3322DANDE-W1-1-020118D

Sample Type: Client

Inject. Date: 13-Feb-2018 12:39:17 ALS Bottle#: 7 Worklist Smp#: 66

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-39-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.3	112.72

## FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-4057SPNSH-W1-2-0201 Lab Sample ID: 280-106036-40 18 Lab File ID: hfpo718B13088.d Matrix: Water Date Collected: 02/01/2018 14:35 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/12/2018 08:23 Sample wt/vol: 251.9(mL) Date Analyzed: 02/13/2018 12:42 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404879 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.022		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	107		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13088.d

Lims ID: 280-106036-D-40-A

Client ID: FAY-D-4059SPNSH-W1-2-020118

Sample Type: Client

Inject. Date: 13-Feb-2018 12:42:32 ALS Bottle#: 8 Worklist Smp#: 67

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-40-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	799188	10.7	1351	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		799188	10.0	1351	
1 Perfluoro(2-p	oropoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	95075	1.08	17.5	

TestAmerica Denver

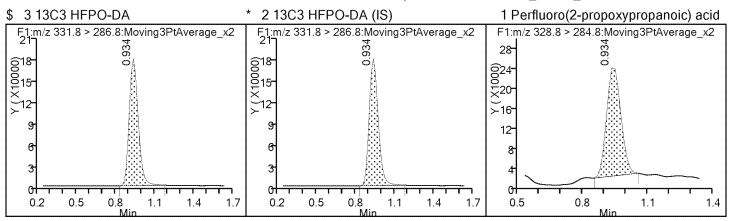
Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13088.d

Injection Date: 13-Feb-2018 12:42:32 Instrument ID: LC\_LCMS7 Lims ID: 280-106036-D-40-A Lab Sample ID: 280-106036-40

Client ID: FAY-D-4059SPNSH-W1-2-020118

Operator ID: JBH ALS Bottle#: 8 Worklist Smp#: 67

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13088.d

Lims ID: 280-106036-D-40-A

Client ID: FAY-D-4059SPNSH-W1-2-020118

Sample Type: Client

Inject. Date: 13-Feb-2018 12:42:32 ALS Bottle#: 8 Worklist Smp#: 67

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-40-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.7	107.04

## FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-5085MRSHR-W1-1-0201 Lab Sample ID: 280-106036-41 18 Lab File ID: hfpo718B13089.d Matrix: Water Date Collected: 02/01/2018 17:10 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/12/2018 08:23 Sample wt/vol: 250.9(mL) Date Analyzed: 02/13/2018 12:45 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404879 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	118		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13089.d

Lims ID: 280-106036-D-41-A

Client ID: FAY-D-5085MRSHR-W1-1-020118

Sample Type: Client

Inject. Date: 13-Feb-2018 12:45:46 ALS Bottle#: 9 Worklist Smp#: 68

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-41-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	878285	11.8	1676	
* 2 13C3 HFPC	DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		878285	10.0	1676	

TestAmerica Denver

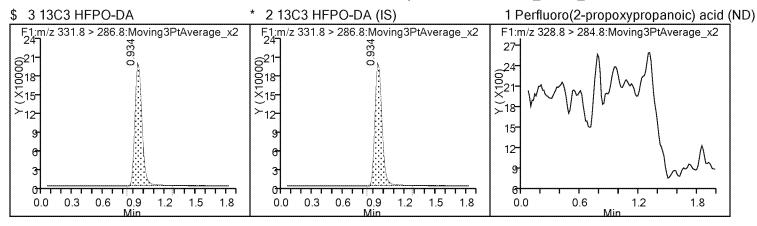
Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13089.d

Injection Date: 13-Feb-2018 12:45:46 Instrument ID: LC\_LCMS7
Lims ID: 280-106036-D-41-A Lab Sample ID: 280-106036-41

Client ID: FAY-D-5085MRSHR-W1-1-020118

Operator ID: JBH ALS Bottle#: 9 Worklist Smp#: 68

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13089.d

Lims ID: 280-106036-D-41-A

Client ID: FAY-D-5085MRSHR-W1-1-020118

Sample Type: Client

Inject. Date: 13-Feb-2018 12:45:46 ALS Bottle#: 9 Worklist Smp#: 68

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-D-41-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.8	117.64

## FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Matrix: Water Lab File ID: hfpo718B13090.d

Analysis Method: 8321A Date Collected: 02/01/2018 07:55

Extraction Method: 3535 Date Extracted: 02/12/2018 08:23

Sample wt/vol: 248.5(mL) Date Analyzed: 02/13/2018 12:49

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: Synergi Hydro ID:

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404879 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	114		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13090.d

Lims ID: 280-106036-C-42-A Client ID: FAY-D-FB-020118

Sample Type: Client

Inject. Date: 13-Feb-2018 12:49:01 ALS Bottle#: 10 Worklist Smp#: 69

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-42-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	848239	11.4	1342	
* 2 13C3 HFPC	DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		848239	10.0	1342	

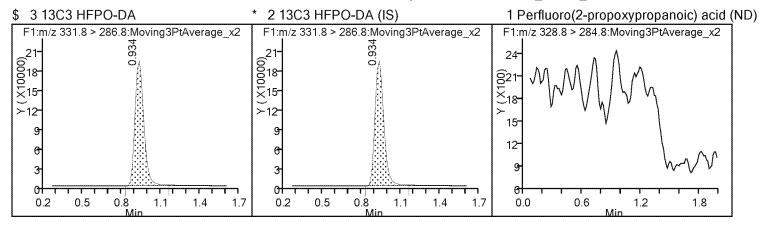
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13090.d

Client ID: FAY-D-FB-020118

Operator ID: JBH ALS Bottle#: 10 Worklist Smp#: 69

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13090.d

Lims ID: 280-106036-C-42-A Client ID: FAY-D-FB-020118

Sample Type: Client

Inject. Date: 13-Feb-2018 12:49:01 ALS Bottle#: 10 Worklist Smp#: 69

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-42-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.4	113.61

## FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Client Sample ID: FAY-D-FB-020118-A Lab Sample ID: 280-106036-43

Matrix: Water Lab File ID: hfpo718B13091.d

Analysis Method: 8321A Date Collected: 02/01/2018 13:00

Extraction Method: 3535 Date Extracted: 02/12/2018 08:23

Sample wt/vol: 246.8(mL) Date Analyzed: 02/13/2018 12:52

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: Synergi Hydro ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 404879 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	111		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13091.d

Lims ID: 280-106036-B-43-A Client ID: FAY-D-FB-020118-A

Sample Type: Client

Inject. Date: 13-Feb-2018 12:52:16 ALS Bottle#: 11 Worklist Smp#: 70

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-43-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	D-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	830688	11.1	1290	
* 2 13C3 HFPC	DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		830688	10.0	1290	

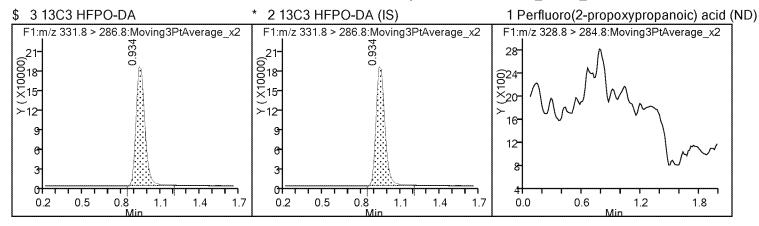
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13091.d

Client ID: FAY-D-FB-020118-A

Operator ID: JBH ALS Bottle#: 11 Worklist Smp#: 70

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13091.d

Lims ID: 280-106036-B-43-A Client ID: FAY-D-FB-020118-A

Sample Type: Client

Inject. Date: 13-Feb-2018 12:52:16 ALS Bottle#: 11 Worklist Smp#: 70

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-43-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK006

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.1	111.26

### FORM VI

## LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver

SDG No.:

Instrument ID: LC\_LCMS7

GC Column: Synergi Hyd ID:

Calibration Start Date: 10/10/2017 09:35

Calibration End Date: 10/10/2017 09:58

Analy Batch No.: 390728

Heated Purge: (Y/N) N

Calibration ID: 30558

#### Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-390728/3	hfpo717J10026.d
Level 2	STD002 280-390728/4	hfpo717J10027.d
Level 3	STD003 280-390728/5	hfpo717J10028.d
Level 4	STD004 280-390728/6	hfpo717J10029.d
Level 5	STD005 280-390728/7	hfpo717J10030.d
Level 6	STD006 280-390728/8	hfpo717J10031.d
Level 7	STD007 280-390728/9	hfpo717J10032.d
Level 8	STD008 280-390728/10	hfpo717J10033.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	RT WINDOW	AVG RT
Perfluoro(2-propoxypropanoic) acid	0.893	0.880	0.880	0.880	0.893	0.880	0.880	0.893	0.385 - 1.385	0.885
13C3 HFPO-DA	0.880	0.880	0.880	0.880	0.880	0.880	0.880	0.880	0.380 - 1.380	0.880

# FORM VI LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-106036-1 Analy Batch No.: 390728

SDG No.:

Instrument ID: LC LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 09:35 Calibration End Date: 10/10/2017 09:58 Calibration ID: 30558

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-390728/3	hfpo717J10026.d
Level 2	STD002 280-390728/4	hfpo717J10027.d
Level 3	STD003 280-390728/5	hfpo717J10028.d
Level 4	STD004 280-390728/6	hfpo717J10029.d
Level 5	STD005 280-390728/7	hfpo717J10030.d
Level 6	STD006 280-390728/8	hfpo717J10031.d
Level 7	STD007 280-390728/9	hfpo717J10032.d
Level 8	STD008 280-390728/10	hfpo717J10033.d

ANALYTE		CE		CURVE		COEFFICIENT		#	MIN CF	%RSD	#	MAX R^2	# MIN R^2
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8	В	M1	M2					%RSD OR COD	OR COD
13C3 HFPO-DA	73075 74460	74523 73194	75043 72919	71803 Ave 70142	<u> </u>	73144.6750	<u> </u>			2.2		30.0	

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

# FORM VI LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA CURVE EVALUATION

Lab Name: TestAmerica Denver	Job No.: 280-106036-1	Analy Batch No.: 390728
SDG No.:		
Instrument ID: LC_LCMS7	GC Column: Synergi Hyd ID:	Heated Purge: (Y/N) N
Calibration Start Date: 10/10/2017 09:35	Calibration End Date: 10/10/2017 09:58	Calibration ID: 30558

ANALYTE			RRF			CURVE		COEFFIC	IENT	#	MIN RRF	%RSD	#	MAX	R^2	#	MIN R^2
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	TYPE	В	M1	М2					%RSD	OR COD		OR COD
Perfluoro(2-propoxypropanoic) acid	1.6980 1.0102	1.7128 0.9824	1		1.0154	Lin1	0.2185	1.0121							0.9980		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

### FORM VI

## LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-106036-1 Analy Batch No.: 390728

SDG No.:

Instrument ID: LC LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Files:

LEVEL:		LAB SAMPLE ID:	LAB FILE ID:
Level	1	STD001 280-390728/3	hfpo717J10026.d
Level	2	STD002 280-390728/4	hfpo717J10027.d
Level	3	STD003 280-390728/5	hfpo717J10028.d
Level	4	STD004 280-390728/6	hfpo717J10029.d
Level	5	STD005 280-390728/7	hfpo717J10030.d
Level	6	STD006 280-390728/8	hfpo717J10031.d
Level	7	STD007 280-390728/9	hfpo717J10032.d
Level	8	STD008 280-390728/10	hfpo717J10033.d

ANALYTE	CURVE			RESPONSE				CONCE	NTRATION (U	JG/L)	
	TYPE	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
13C3 HFPO-DA	Ave	730749 731935	745227 729188	750427 701420	718028	744600	10.0 10.0	10.0 10.0	10.0 10.0	10.0	10.0

Curve Type Legend:

Ave = Average

### FORM VI

## LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-106036-1 Analy Batch No.: 390728

SDG No.:

Instrument ID: LC LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Files:

LEVEL:	:	LAB SAMPLE ID:	LAB FILE ID:
Level	1	STD001 280-390728/3	hfpo717J10026.d
Level	2	STD002 280-390728/4	hfpo717J10027.d
Level	3	STD003 280-390728/5	hfpo717J10028.d
Level	4	STD004 280-390728/6	hfpo717J10029.d
Level	5	STD005 280-390728/7	hfpo717J10030.d
Level	6	STD006 280-390728/8	hfpo717J10031.d
Level	7	STD007 280-390728/9	hfpo717J10032.d
Level	8	STD008 280-390728/10	hfpo717J10033.d

ANALYTE	IS	CURVE			RESPONSE				CONCE	NTRATION (U	JG/L)	
	REF	TYPE	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			TAT 6	7 A T A T	TAT 9			7777 0	T A T \	TAT 9		
Perfluoro(2-propoxypropanoic) acid	13CP	Lin1	31020	63823	89272	167109	378047	0.250	0.500	1.00	2.00	5.00
	ODA		739399	1790812	3654104			10.0	25.0	50.0		

Curve Type Legend:

Lin1 = Linear 1/conc ISTD

Report Date: 10-Oct-2017 12:51:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10026.d

Lims ID: std001

Client ID:

Sample Type: IC Calib Level: 1

Inject. Date: 10-Oct-2017 09:35:28 ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L1

Misc. Info.: HFPO17J10

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 10-Oct-2017 12:51:45 Calib Date: 10-Oct-2017 09:58:07

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1: Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:50:42

	Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
	3 13C3 HFPC 31.8 > 286.8	D-DA 0.880	0.880	0.0	1.000	730749	10.0	397	
	2 13C3 HFPO 31.8 > 286.8	-DA (IS) 0.880	0.880	0.0		730749	10.0	397	
	1 Perfluoro(2-p	oropoxyp	ropanoi	c) acid					M
3	28.8 > 284.8	0.893	0.885	0.008	1.000	31020	0.2036	14.1	M

### QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HFPO\_CAL-1\_00031 Amount Added: 1.00 Units: mL

Report Date: 10-Oct-2017 12:51:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10026.d

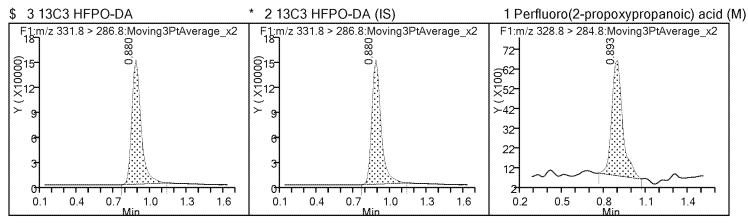
Injection Date: 10-Oct-2017 09:35:28 Instrument ID: LC\_LCMS7

Lims ID: std001

Client ID:

Operator ID: JBH ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 10-Oct-2017 12:51:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46 Manual Integration/User Assign Peak Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10026.d

Injection Date: 10-Oct-2017 09:35:28 Instrument ID: LC LCMS7

Lims ID: std001

Client ID:

Operator ID: JBH ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du

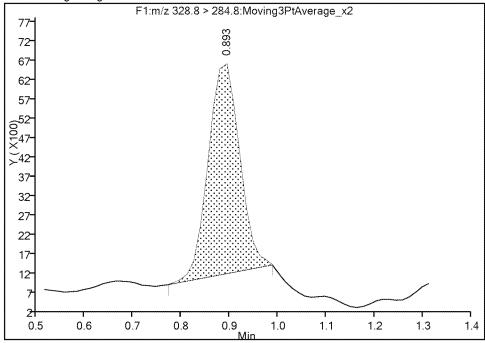
Column: Detector F1:MRM

### 1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

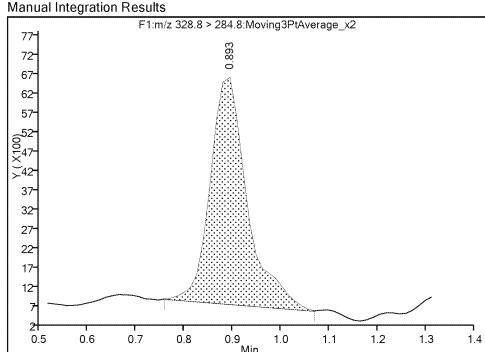
RT: 0.89
Area: 24407
Amount: 0.162386
Amount Units: ug/l

Processing Integration Results



RT: 0.89
Area: 31020
Amount: 0.203553
Amount Units: ug/l

7



Reviewer: meyera, 10-Oct-2017 11:50:40

Audit Action: Manually Integrated

Audit Reason: Baseline

Page 389 of 711

Report Date: 10-Oct-2017 12:51:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10027.d

Lims ID: std002

Client ID:

Sample Type: IC Calib Level: 2

Inject. Date: 10-Oct-2017 09:38:42 ALS Bottle#: 3 Worklist Smp#: 4

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L2

Misc. Info.: HFPO17J10

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 10-Oct-2017 12:51:46 Calib Date: 10-Oct-2017 09:58:07

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1: Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:50:49

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
* 2 13C3 HFP0 331.8 > 286.8	D-DA (IS) 0.880	0.880	0.0		745227	10.0	452		
\$ 3 13C3 HFP6 331.8 > 286.8	O-DA 0.880	0.880	0.0	1.000	745227	10.2	452		
1 Perfluoro(2-	-propoxyp	oropanoi	c) acid						
328.8 > 284.8	0.880	0.885	-0.005	1.000	63823	0.6303	36.5		

Reagents:

HFPO\_CAL-2\_00032 Amount Added: 1.00 Units: mL

Report Date: 10-Oct-2017 12:51:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10027.d

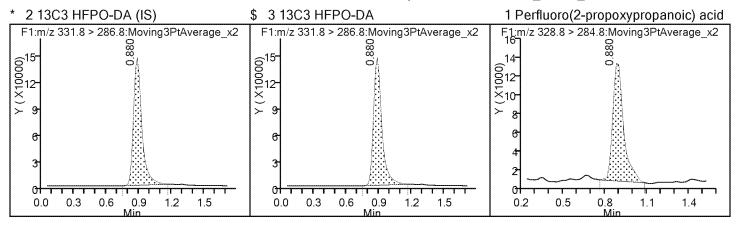
Injection Date: 10-Oct-2017 09:38:42 Instrument ID: LC\_LCMS7

Lims ID: std002

Client ID:

Operator ID: JBH ALS Bottle#: 3 Worklist Smp#: 4

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 10-Oct-2017 12:51:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10028.d

Lims ID: std003

Client ID:

Sample Type: IC Calib Level: 3

Inject. Date: 10-Oct-2017 09:41:56 ALS Bottle#: 4 Worklist Smp#: 5

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L3

Misc. Info.: HFPO17J10

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 10-Oct-2017 12:51:47 Calib Date: 10-Oct-2017 09:58:07

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1: Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:50:52

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC 331.8 > 286.8	0.880	0.880	0.0	1.000	750427	10.3	417	
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 0.880	0.880	0.0		750427	10.0	417	
1 Perfluoro(2-p	oropoxyp	ropanoi	c) acid					
328.8 > 284.8	0.880	0.885	-0.005	1.000	89272	0.9595	50.3	
D								

Reagents:

HFPO\_CAL-3\_00031 Amount Added: 1.00 Units: mL

Report Date: 10-Oct-2017 12:51:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10028.d

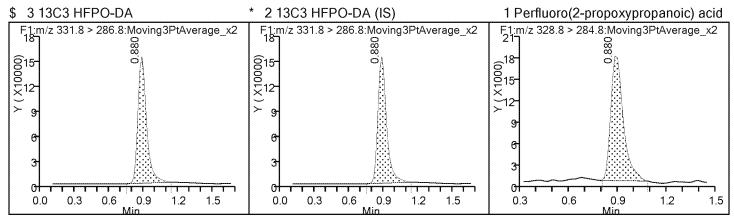
Injection Date: 10-Oct-2017 09:41:56 Instrument ID: LC\_LCMS7

Lims ID: std003

Client ID:

Operator ID: JBH ALS Bottle#: 4 Worklist Smp#: 5

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 10-Oct-2017 12:51:48 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10029.d

Lims ID: std004

Client ID:

Sample Type: IC Calib Level: 4

Inject. Date: 10-Oct-2017 09:45:11 ALS Bottle#: 5 Worklist Smp#: 6

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L4

Misc. Info.: HFPO17J10

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 10-Oct-2017 12:51:47 Calib Date: 10-Oct-2017 09:58:07

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1: Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:50:55

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 2 13C3 HFPC 331.8 > 286.8	0-DA (IS) 0.880		0.0		718028	10.0	438	
\$ 3 13C3 HFPC 331.8 > 286.8	D-DA 0.880	0.880	0.0	1.000	718028	9.82	438	
1 Perfluoro(2-		•	•	1 000	107100	0.00	4.40	
328.8 > 284.8	0.880	0.885	-0.005	1.000	167109	2.08	143	

Reagents:

HFPO\_CAL-4\_00031 Amount Added: 1.00 Units: mL

Report Date: 10-Oct-2017 12:51:48 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10029.d

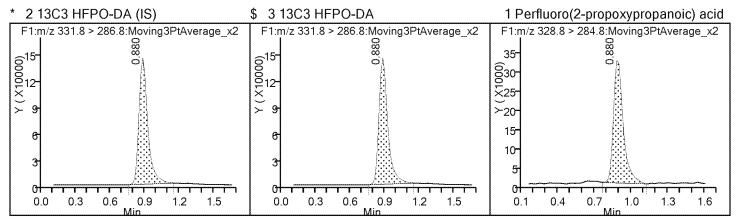
Injection Date: 10-Oct-2017 09:45:11 Instrument ID: LC\_LCMS7

Lims ID: std004

Client ID:

Operator ID: JBH ALS Bottle#: 5 Worklist Smp#: 6

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 10-Oct-2017 12:51:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10030.d

Lims ID: std005

Client ID:

Sample Type: IC Calib Level: 5

Inject. Date: 10-Oct-2017 09:48:25 ALS Bottle#: 6 Worklist Smp#: 7

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L5

Misc. Info.: HFPO17J10

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 10-Oct-2017 12:51:48 Calib Date: 10-Oct-2017 09:58:07

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1: Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:50:57

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC 331.8 > 286.8	D-DA 0.880	0.880	0.0	1.000	744600	10.2	433	
* 2 13C3 HFPC 331.8 > 286.8	0-DA (IS) 0.880	0.880	0.0		744600	10.0	433	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.893	0.885	0.008	1.000	378047	4.80	223	
Doggonto:								

Reagents:

HFPO\_CAL-5\_00070 Amount Added: 1.00 Units: mL

Report Date: 10-Oct-2017 12:51:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10030.d

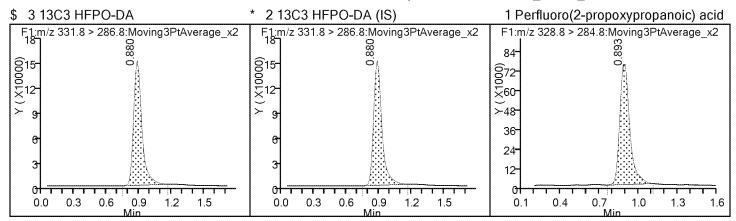
Injection Date: 10-Oct-2017 09:48:25 Instrument ID: LC\_LCMS7

Lims ID: std005

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 7

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 10-Oct-2017 12:51:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10031.d

Lims ID: std006

Client ID:

Sample Type: IC Calib Level: 6

Inject. Date: 10-Oct-2017 09:51:39 ALS Bottle#: 7 Worklist Smp#: 8

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L6

Misc. Info.: HFPO17J10

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 10-Oct-2017 12:51:49 Calib Date: 10-Oct-2017 09:58:07

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1: Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:51:00

Signa	ı RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 2 13C3 331.8 > 28	HFPO-DA (IS 6.8 0.880	•	0.0		731935	10.0	379	
\$ 3 13C3 331.8 > 28		0.880	0.0	1.000	731935	10.0	379	
1 Perfluct 328.8 > 28	oro(2-propox) 4.8 0.880		c) acid -0.005	1.000	739399	9.77	298	
Dan = 0		0.000	-0.003	1.000	700000	3.77	230	

Reagents:

HFPO\_CAL-6\_00070 Amount Added: 1.00 Units: mL

Report Date: 10-Oct-2017 12:51:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10031.d

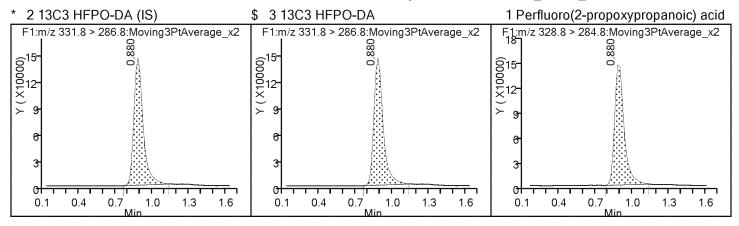
Injection Date: 10-Oct-2017 09:51:39 Instrument ID: LC\_LCMS7

Lims ID: std006

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 8

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 10-Oct-2017 12:51:50 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10032.d

Lims ID: std007

Client ID:

Sample Type: IC Calib Level: 7

Inject. Date: 10-Oct-2017 09:54:53 ALS Bottle#: 8 Worklist Smp#: 9

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L7

Misc. Info.: HFPO17J10

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 10-Oct-2017 12:51:50 Calib Date: 10-Oct-2017 09:58:07

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1: Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:51:04

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPO 331.8 > 286.8	0.880	0.880	0.0	1.000	729188	9.97	404		
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 0.880	0.880	0.0		729188	10.0	404		
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid						
328.8 > 284.8	0.880	0.885	-0.005	1.000	1790812	24.0	386		
Doogonto:									

Reagents:

HFPO\_CAL-7\_00031 Amount Added: 1.00 Units: mL

Report Date: 10-Oct-2017 12:51:50 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10032.d

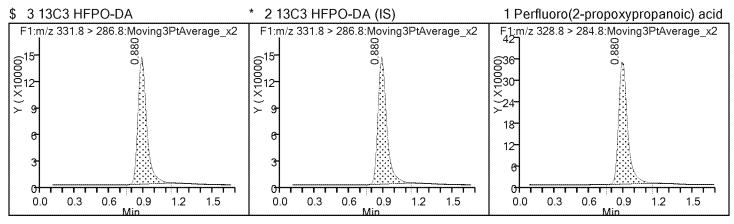
Injection Date: 10-Oct-2017 09:54:53 Instrument ID: LC\_LCMS7

Lims ID: std007

Client ID:

Operator ID: JBH ALS Bottle#: 8 Worklist Smp#: 9

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 10-Oct-2017 12:51:51 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10033.d

Lims ID: std008

Client ID:

Sample Type: IC Calib Level: 8

Inject. Date: 10-Oct-2017 09:58:07 ALS Bottle#: 9 Worklist Smp#: 10

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L8

Misc. Info.: HFPO17J10

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 10-Oct-2017 12:51:51 Calib Date: 10-Oct-2017 09:58:07

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1: Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:51:08

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 0.880	0.880	0.0		701420	10.0	373		
\$ 3 13C3 HFPO 331.8 > 286.8	0.880	0.880	0.0	1.000	701420	9.59	373		
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid						
328.8 > 284.8	0.893	0.885	0.008	1.000	3654104	51.3	421		
<b></b>									

Reagents:

HFPO\_CAL-8\_00031 Amount Added: 1.00 Units: mL

Report Date: 10-Oct-2017 12:51:51 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10033.d

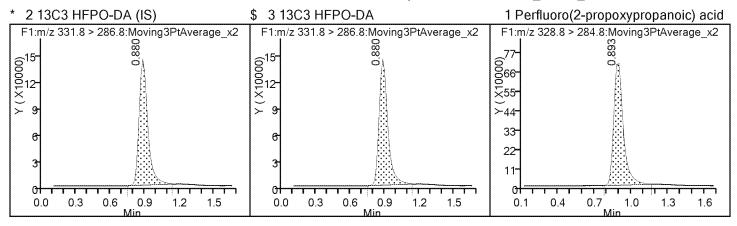
Injection Date: 10-Oct-2017 09:58:07 Instrument ID: LC\_LCMS7

Lims ID: std008

Client ID:

Operator ID: JBH ALS Bottle#: 9 Worklist Smp#: 10

Injection Vol: 20.0 ul Dil. Factor: 1.0000



#### FORM VI

# LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver

SDG No.:

Instrument ID: LC\_LCMS7

GC Column: Synergi Hyd ID:

Calibration Start Date: 02/08/2018 13:05

Calibration End Date: 02/08/2018 13:31

Analy Batch No.: 404345

Heated Purge: (Y/N) N

Calibration ID: 31612

#### Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-404345/3	hfpo718B08034.d
Level 2	STD002 280-404345/4	hfpo718B08035.d
Level 3	STD003 280-404345/5	hfpo718B08036.d
Level 4	STD004 280-404345/6	hfpo718B08037.d
Level 5	STD005 280-404345/7	hfpo718B08038.d
Level 6	STD006 280-404345/8	hfpo718B08039.d
Level 7	STD007 280-404345/9	hfpo718B08040.d
Level 8	STD008 280-404345/10	hfpo718B08041.d
Level 9	STD009 280-404345/11	hfpo718B08042.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9	RT WINDOW	AVG RT
HFPO-DA	1.056	1.056	1.056	1.056	1.056	1.056	1.056	1.056	1.056	 0.556 - 1.556	1.056
13C3 HFPO-DA	1.042	1.042	1.042	1.042	1.042	1.042	1.042	1.056	1.056	0.545 - 1.545	1.045

# FORM VI LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-106036-1 Analy Batch No.: 404345

SDG No.:

Instrument ID: LC LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2018 13:05 Calibration End Date: 02/08/2018 13:31 Calibration ID: 31612

Calibration Files:

LEVEL:		LAB SAMPLE	ID:	LAB FILE ID:
Level	1	STD001 280	-404345/3	hfpo718B08034.d
Level	2	STD002 280	-404345/4	hfpo718B08035.d
Level	3	STD003 280	-404345/5	hfpo718B08036.d
Level	4	STD004 280	-404345/6	hfpo718B08037.d
Level	5	STD005 280	-404345/7	hfpo718B08038.d
Level	6	STD006 280	-404345/8	hfpo718B08039.d
Level	7	STD007 280	-404345/9	hfpo718B08040.d
Level	8	STD008 280	-404345/10	hfpo718B08041.d
Level	9	STD009 280	-404345/11	hfpo718B08042.d

ANALYTE		C	F'		CURVE		COEFFICIENT		#	MIN CF	%RSD	#	MAX R^2	# MIN R^2
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8	TYPE	В	M1	M2					%RSD OR COD	OR COD
13C3 HFPO-DA	75771 75244 71284	75964 75940	72010 75039	77000 73687	1		74659.8778				2.6		30.0	

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

# FORM VI LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA CURVE EVALUATION

Lab Name: TestAmerica Denver	Job No.: 280-106036-1	Analy Batch No.: 404345
SDG No.:		
Instrument ID: LC_LCMS7	GC Column: Synergi Hyd ID:	Heated Purge: (Y/N) N
Calibration Start Date: 02/08/2018 13:05	Calibration End Date: 02/08/2018 13:31	Calibration ID: 31612

ANALYTE			RRF			CURVE		COEFFIC	ENT	#	MIN RRF	%RSD	#	MAX	R^2	#	MIN R^2
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4 LVL 9	LVL 5	TYPE	В	Ml	M2					%RSD	OR COD		OR COD
HFPO-DA	1.1630 1.1128		1.0756 1.0665		1.1211	Lin1	0.0361	1.0638							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

#### FORM VI

## LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-106036-1 Analy Batch No.: 404345

SDG No.:

Instrument ID: LC LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2018 13:05 Calibration End Date: 02/08/2018 13:31 Calibration ID: 31612

Calibration Files:

LEVEL	:	LAB SAMPLE ID:	LAB FILE ID:
Level	1	STD001 280-404345/3	hfpo718B08034.d
Level	2	STD002 280-404345/4	hfpo718B08035.d
Level	3	STD003 280-404345/5	hfpo718B08036.d
Level	4	STD004 280-404345/6	hfpo718B08037.d
Level	5	STD005 280-404345/7	hfpo718B08038.d
Level	6	STD006 280-404345/8	hfpo718B08039.d
Level	7	STD007 280-404345/9	hfpo718B08040.d
Level	8	STD008 280-404345/10	hfpo718B08041.d
Level	9	STD009 280-404345/11	hfpo718B08042.d

ANALYTE	CURVE			RESPONSE				CONCE	NTRATION (	UG/L)	
	TYPE	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
13C3 HFPO-DA	Ave	757714 759397	759642 750388	720099 736869	769995 712841	752444	10.0	10.0	10.0 10.0	10.0	10.0

Curve Type Legend:

Ave = Average

#### FORM VI

#### LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-106036-1 Analy Batch No.: 404345

SDG No.:

GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N Instrument ID: LC LCMS7

Calibration End Date: 02/08/2018 13:31 Calibration Start Date: 02/08/2018 13:05 Calibration ID: 31612

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-404345/3	hfpo718B08034.d
Level 2	STD002 280-404345/4	hfpo718B08035.d
Level 3	STD003 280-404345/5	hfpo718B08036.d
Level 4	STD004 280-404345/6	hfpo718B08037.d
Level 5	STD005 280-404345/7	hfpo718B08038.d
Level 6	STD006 280-404345/8	hfpo718B08039.d
Level 7	STD007 280-404345/9	hfpo718B08040.d
Level 8	STD008 280-404345/10	hfpo718B08041.d
Level 9	STD009 280-404345/11	hfpo718B08042.d

	ANALYTE	IS	CURVE			RESPONSE				CONCE	NTRATION (	UG/L)	
		REF	TYPE	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
-				плп о	ш∨п /	тип о	TI A TI 2		TAT 0	T A T 1	ПАП О	TAT 2	
F	HFPO-DA	13CP	Lin1	22031	42730	77455	162117	421775	0.250	0.500	1.00	2.00	5.00
		ODA		845082	2046873	3929397	7489478		10.0	25.0	50.0	100	

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver

Target Compound Quantitation Report

Lims ID: std001

Client ID:

Sample Type: IC Calib Level: 1

Inject. Date: 08-Feb-2018 13:05:38 ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L1

Misc. Info.: HFPO18B08

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 08-Feb-2018 15:24:13 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:04

	Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
	2 13C3 HFPO 31.8 > 286.8	-DA (IS) 1.042	1.045	-0.003		757714	10.0	1562	
	3 13C3 HFPC 31.8 > 286.8	)-DA 1.042	1.045	-0.003	1.000	757714	10.1	1562	
	1 Perfluoro(2-p	oropoxyp	ropanoi	c) acid					М
32	28.8 > 284.8	1.056	1.056	0.0	1.000	22031	0.2394	4.4	M

### QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HFPO\_CAL-1\_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08034.d

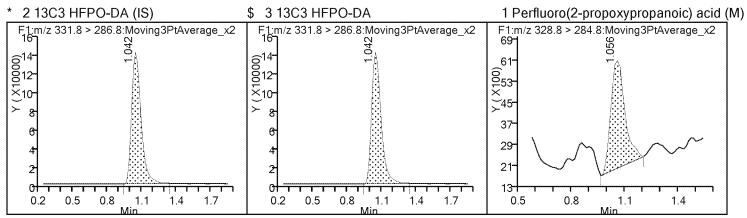
Injection Date: 08-Feb-2018 13:05:38 Instrument ID: LC\_LCMS7

Lims ID: std001

Client ID:

Operator ID: JBH ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 08-Feb-2018 15:24:14 Chrom Revision: 2.2 24-Jan-2018 15:37:30 Manual Integration/User Assign Peak Report

#### TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08034.d

Injection Date: 08-Feb-2018 13:05:38 Instrument ID: LC LCMS7

Lims ID: std001

Client ID:

Operator ID: JBH ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du

Column: Detector F1:MRM

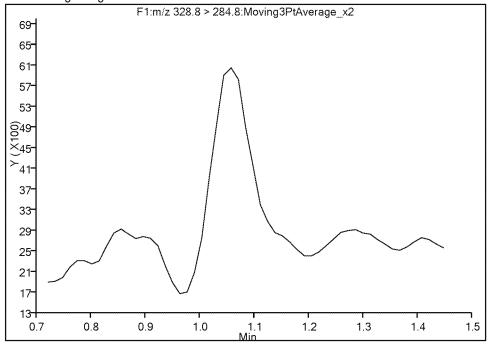
## 1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

Not Detected

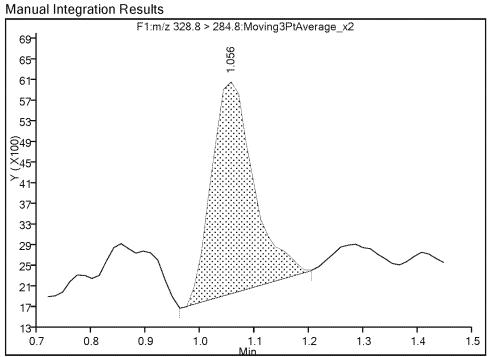
Expected RT: 1.06

Processing Integration Results



RT: 1.06 Area: 22031 Amount: 0.239356

Amount Units: ug/l



Reviewer: meyera, 08-Feb-2018 15:19:01

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Page 411 of 711

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08035.d

Lims ID: std002

Client ID:

Sample Type: IC Calib Level: 2

Inject. Date: 08-Feb-2018 13:08:52 ALS Bottle#: 3 Worklist Smp#: 4

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L2

Misc. Info.: HFPO18B08

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 08-Feb-2018 15:24:14 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:16

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	1.042	1.045	-0.003	1.000	759642	10.2	1267	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	1.042	1.045	-0.003		759642	10.0	1267	
1 Perfluoro(2-	oropoxyp	ropanoi	c) acid					М
328.8 > 284.8	1.056	1.056	0.0	1.000	42730	0.4948	6.5	M

### QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HFPO\_CAL-2\_00033 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08035.d

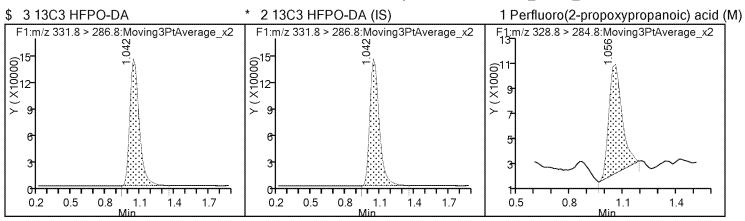
Injection Date: 08-Feb-2018 13:08:52 Instrument ID: LC\_LCMS7

Lims ID: std002

Client ID:

Operator ID: JBH ALS Bottle#: 3 Worklist Smp#: 4

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 08-Feb-2018 15:24:14 Chrom Revision: 2.2 24-Jan-2018 15:37:30 Manual Integration/User Assign Peak Report

TestAmerica Denver

Data File:

Injection Date: 08-Feb-2018 13:08:52 Instrument ID: LC LCMS7

Lims ID: std002

Client ID:

Operator ID: JBH ALS Bottle#: 3 Worklist Smp#: 4

Injection Vol: 20.0 ul 1.0000 Dil. Factor:

Method: **HFPO** Limit Group: LC - 8321A\_HFPO\_Du

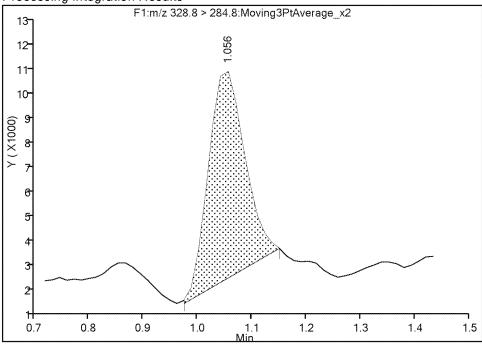
Column: Detector F1:MRM

## 1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

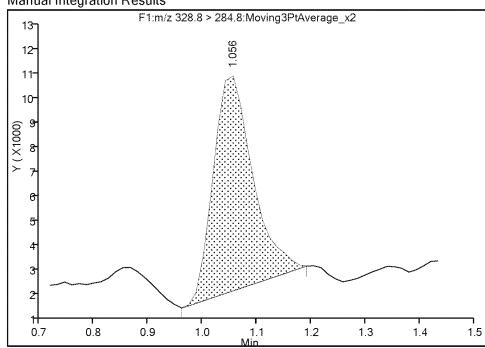
RT: 1.06 Area: 38092 0.452274 Amount: Amount Units: ug/l

Processing Integration Results



RT: 1.06 Area: 42730 Amount: 0.494804 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 08-Feb-2018 15:19:12

Audit Action: Manually Integrated

Audit Reason: Baseline

Page 414 of 711

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08036.d

Lims ID: std003

Client ID:

Sample Type: IC Calib Level: 3

Inject. Date: 08-Feb-2018 13:12:06 ALS Bottle#: 4 Worklist Smp#: 5

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L3

Misc. Info.: HFPO18B08

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 08-Feb-2018 15:24:14 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:19

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 2 13C3 HFPC	. ,	1.045	-0.003		720099	10.0	956	
\$ 3 13C3 HFPC	D-DA		0.000					
331.8 > 286.8 1 Perfluoro(2-	1.042 propoxyr			1.000	720099	9.65	956	
328.8 > 284.8	1.056		0.0	1.000	77455	0.9771	10.6	

Reagents:

HFPO\_CAL-3\_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08036.d

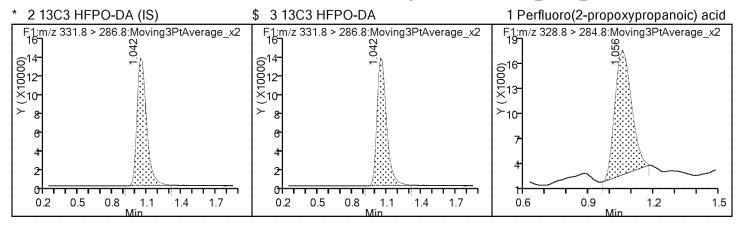
Injection Date: 08-Feb-2018 13:12:06 Instrument ID: LC\_LCMS7

Lims ID: std003

Client ID:

Operator ID: JBH ALS Bottle#: 4 Worklist Smp#: 5

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08037.d

Lims ID: std004

Client ID:

Sample Type: IC Calib Level: 4

Inject. Date: 08-Feb-2018 13:15:21 ALS Bottle#: 5 Worklist Smp#: 6

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L4

Misc. Info.: HFPO18B08

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 08-Feb-2018 15:24:15 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:22

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPO 331.8 > 286.8	)-DA 1.042	1.045	-0.003	1.000	769995	10.3	1154		
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 1.042	1.045	-0.003		769995	10.0	1154		
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid						
328.8 > 284.8	1.056	1.056	0.0	1.000	162117	1.95	26.1		
Doggonte:									

Reagents:

HFPO\_CAL-4\_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08037.d

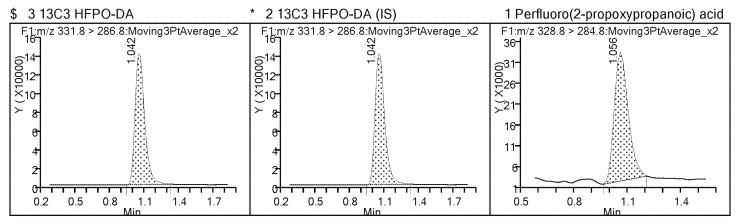
Injection Date: 08-Feb-2018 13:15:21 Instrument ID: LC\_LCMS7

Lims ID: std004

Client ID:

Operator ID: JBH ALS Bottle#: 5 Worklist Smp#: 6

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08038.d

Lims ID: std005

Client ID:

Sample Type: IC Calib Level: 5

Inject. Date: 08-Feb-2018 13:18:35 ALS Bottle#: 6 Worklist Smp#: 7

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L5

Misc. Info.: HFPO18B08

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 08-Feb-2018 15:24:15 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:24

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 1.042	1.045	-0.003		752444	10.0	1072		
\$ 3 13C3 HFPO 331.8 > 286.8		1.045	-0.003	1.000	752444	10.1	1072		
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid						
328.8 > 284.8	1.056	1.056	0.0	1.000	421775	5.24	66.0		
n									

Reagents:

HFPO\_CAL-5\_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08038.d

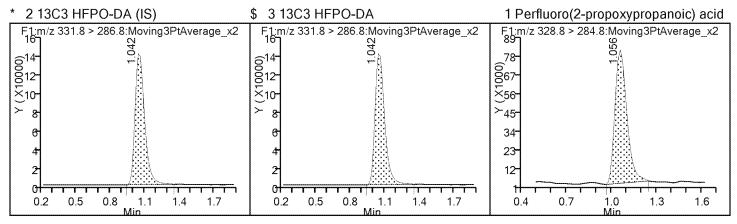
Injection Date: 08-Feb-2018 13:18:35 Instrument ID: LC\_LCMS7

Lims ID: std005

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 7

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08039.d

Lims ID: std006

Client ID:

Sample Type: IC Calib Level: 6

Inject. Date: 08-Feb-2018 13:21:49 ALS Bottle#: 7 Worklist Smp#: 8

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L6

Misc. Info.: HFPO18B08

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 08-Feb-2018 15:24:16 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:26

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPO		4.045	0.000	4 000	750007	40.0	4400		
331.8 > 286.8 * 2 13C3 HFPO	1.042 -DA (IS)	1.045	-0.003	1.000	759397	10.2	1193		
331.8 > 286.8	1.042		-0.003		759397	10.0	1193		
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid						
328.8 > 284.8	1.056	1.056	0.0	1.000	845082	10.4	146		
Doggonte:									

Reagents:

HFPO\_CAL-6\_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08039.d

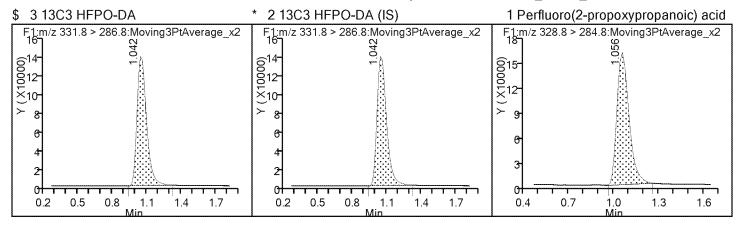
Injection Date: 08-Feb-2018 13:21:49 Instrument ID: LC\_LCMS7

Lims ID: std006

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 8

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08040.d

Lims ID: std007

Client ID:

Sample Type: IC Calib Level: 7

Inject. Date: 08-Feb-2018 13:25:03 ALS Bottle#: 8 Worklist Smp#: 9

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L7

Misc. Info.: HFPO18B08

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 08-Feb-2018 15:24:16 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:28

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 1.042	1.045	-0.003		750388	10.0	1247		
\$ 3 13C3 HFPC 331.8 > 286.8	)-DA 1.042	1.045	-0.003	1.000	750388	10.1	1247		
1 Perfluoro(2-p 328.8 > 284.8	oropoxyp 1.056	ropanoi 1.056	c) acid 0.0	1.000	2046873	25.6	246		
Doggonte:	1.000	1.000	0.0	7.000	20.0070	20.0			

Reagents:

HFPO\_CAL-7\_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08040.d

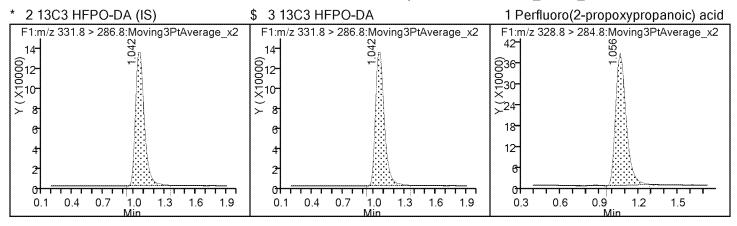
Injection Date: 08-Feb-2018 13:25:03 Instrument ID: LC\_LCMS7

Lims ID: std007

Client ID:

Operator ID: JBH ALS Bottle#: 8 Worklist Smp#: 9

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08041.d

Lims ID: std008

Client ID:

Sample Type: IC Calib Level: 8

Inject. Date: 08-Feb-2018 13:28:18 ALS Bottle#: 9 Worklist Smp#: 10

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L8

Misc. Info.: HFPO18B08

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 08-Feb-2018 15:24:17 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:30

	Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$	3 13C3 HFPC	DA							
3	331.8 > 286.8	1.056	1.045	0.011	1.000	736869	9.87	1055	
*	2 13C3 HFPO	-DA (IS)							
3	331.8 > 286.8	1.056	1.045	0.011		736869	10.0	1055	
	1 Perfluoro(2-p	propoxyp	ropanoi	c) acid					
3	328.8 > 284.8	1.056	1.056	0.0	1.000	3929397	50.1	416	
r	Jacanta:								

Reagents:

HFPO\_CAL-8\_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08041.d

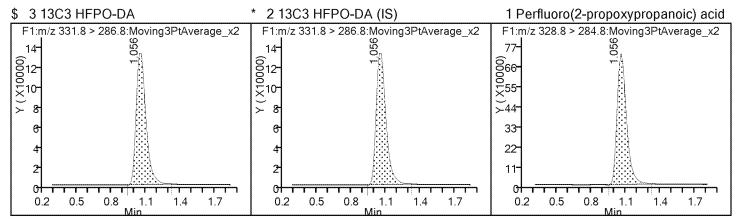
Injection Date: 08-Feb-2018 13:28:18 Instrument ID: LC\_LCMS7

Lims ID: std008

Client ID:

Operator ID: JBH ALS Bottle#: 9 Worklist Smp#: 10

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Lims ID: std009

Client ID:

Sample Type: IC Calib Level: 9

Inject. Date: 08-Feb-2018 13:31:32 ALS Bottle#: 10 Worklist Smp#: 11

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: L9

Misc. Info.: HFPO18B08

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 08-Feb-2018 15:24:17 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:38

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 1.056	1.045	0.011		712841	10.0	1141		
\$ 3 13C3 HFPO 331.8 > 286.8	)-DA 1.056	1.045	0.011	1.000	712841	9.55	1141		
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid						
328.8 > 284.8	1.056	1.056	0.0	1.000	7489478	98.7	561		

Reagents:

HFPO\_CAL-9\_00001 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

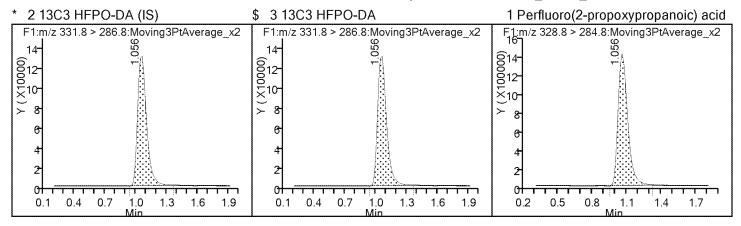
Injection Date: 08-Feb-2018 13:31:32 Instrument ID: LC\_LCMS7

Lims ID: std009

Client ID:

Operator ID: JBH ALS Bottle#: 10 Worklist Smp#: 11

Injection Vol: 20.0 ul Dil. Factor: 1.0000



# FORM VII LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

SDG No.:

Job No.: 280-106036-1

Lab Sample ID: <a href="ICV 280-390728/13">ICV 280-390728/13</a> Calibration Date: <a href="IO/10/2017">10:07</a>

Instrument ID: LC\_LCMS7 Calib Start Date: 10/10/2017 09:35

GC Column: Synergi Hydro ID: Calib End Date: 10/10/2017 09:58

Lab File ID: hfpo717J10036.d

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
Perfluoro(2-propoxypropanoic ) acid	Lin1		1.154		2.07	2.00	3.3	20.0
13C3 HFPO-DA	Ave	73145	72923		9.97	10.0	-0.3	

Conc. Units: ug/L

Report Date: 10-Oct-2017 12:51:53 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10036.d

Lims ID: ICV

Client ID:

Sample Type: ICV

Inject. Date: 10-Oct-2017 10:07:48 ALS Bottle#: 10 Worklist Smp#: 13

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: ICV

Misc. Info.: HFPO17J10

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist:

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 10-Oct-2017 12:51:53 Calib Date: 10-Oct-2017 09:58:07

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1: Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:51:34

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC 331.8 > 286.8	)-DA 0.880	0.880	0.0	1.000	729225	9.97	396	
* 2 13C3 HFPC 331.8 > 286.8	0.880		0.0		729225	10.0	396	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.893	0.885	0.008	1.000	168368	2.07	111	
December								

Reagents:

HFPO\_ICV\_00032 Amount Added: 1.00 Units: mL

Report Date: 10-Oct-2017 12:51:53 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20171010-63483.b\hfpo717J10036.d

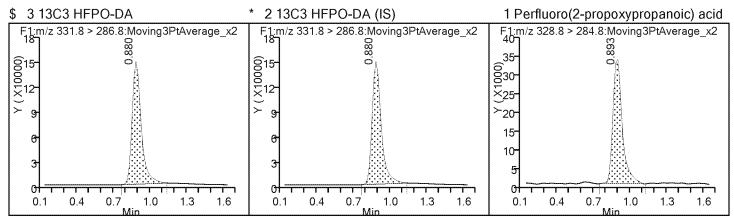
Injection Date: 10-Oct-2017 10:07:48 Instrument ID: LC\_LCMS7

Lims ID: ICV

Client ID:

Operator ID: JBH ALS Bottle#: 10 Worklist Smp#: 13

Injection Vol: 20.0 ul Dil. Factor: 1.0000



# FORM VII LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404641/30 Calibration Date: 02/12/2018 13:38

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B12063.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.148		5.36	5.00	7.2	20.0
13C3 HFPO-DA	Ave	74660	63027		8.44	10.0	-15.6	

Report Date: 12-Feb-2018 14:31:21 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12063.d

Lims ID: CCV L5

Client ID:

Sample Type: CCV

Inject. Date: 12-Feb-2018 13:38:59 ALS Bottle#: 6 Worklist Smp#: 30

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L5

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:29:51

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPC		4.045	0.004	4 000	000000	0.44	4504		
331.8 > 286.8 * 2 13C3 HFPO	0.961	1.045	-0.084	1.000	630269	8.44	1581		
331.8 > 286.8	0.961	1.045	-0.084		630269	10.0	1581		
1 Perfluoro(2-p	oropoxyp	ropanoi	c) acid						
328.8 > 284.8	0.961	1.056	-0.095	1.000	361706	5.36	112		
Dagageta:									

Reagents:

HFPO\_CAL-5\_00080 Amount Added: 1.00 Units: mL

Report Date: 12-Feb-2018 14:31:21 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12063.d

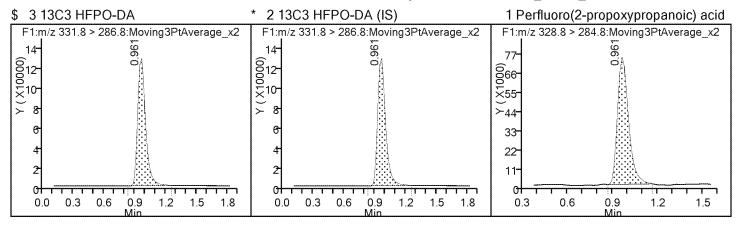
Injection Date: 12-Feb-2018 13:38:59 Instrument ID: LC\_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 30

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404641/41 Calibration Date: 02/12/2018 14:14

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B12074.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.116		10.5	10.0	4.5	20.0
13C3 HFPO-DA	Ave	74660	65647		8.79	10.0	-12.1	

Report Date: 12-Feb-2018 14:31:30 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12074.d

Lims ID: CCV L6

Client ID:

Sample Type: CCV

Inject. Date: 12-Feb-2018 14:14:58 ALS Bottle#: 7 Worklist Smp#: 41

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L6

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:30:30

	Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags		
\$	3 13C3 HFPC	)-DA									
3	331.8 > 286.8	0.961	1.045	-0.084	1.000	656470	8.79	1480			
*	2 13C3 HFPO	-DA (IS)									
3	331.8 > 286.8	0.961	1.045	-0.084		656470	10.0	1480			
	1 Perfluoro(2-propoxypropanoic) acid										
3	328.8 > 284.8	0.961	1.056	-0.095	1.000	732478	10.5	159			
r	Daganta:										

Reagents:

HFPO\_CAL-6\_00080 Amount Added: 1.00 Units: mL

Report Date: 12-Feb-2018 14:31:30 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12074.d

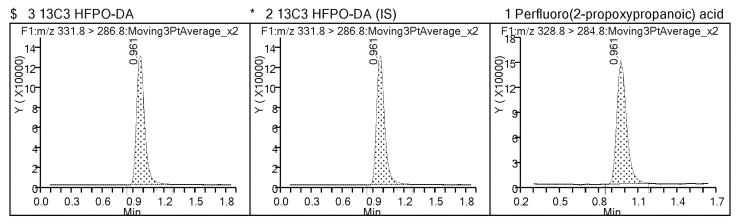
Injection Date: 12-Feb-2018 14:14:58 Instrument ID: LC\_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 41

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404642/48 Calibration Date: 02/12/2018 14:37

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B12081.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.195		5.58	5.00	11.6	20.0
13C3 HFPO-DA	Ave	74660	66149		8.86	10.0	-11.4	

Report Date: 12-Feb-2018 14:51:39 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12081.d

Lims ID: CCV L5

Client ID:

Sample Type: CCV

Inject. Date: 12-Feb-2018 14:37:48 ALS Bottle#: 6 Worklist Smp#: 48

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L5

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:51:39 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:51:18

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HF 331.8 > 286.		1.045	-0.084	1.000	661491	8.86	1313		
* 2 13C3 HF 331.8 > 286.	` '	1.045	-0.084		661491	10.0	1313		
1 Perfluoro(2-propoxypropanoic) acid 328.8 > 284.8									
328.8 > 284.		1.056	-0.095	1.000	395189	5.58	157		

Reagents:

HFPO\_CAL-5\_00080 Amount Added: 1.00 Units: mL

Report Date: 12-Feb-2018 14:51:39 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12081.d

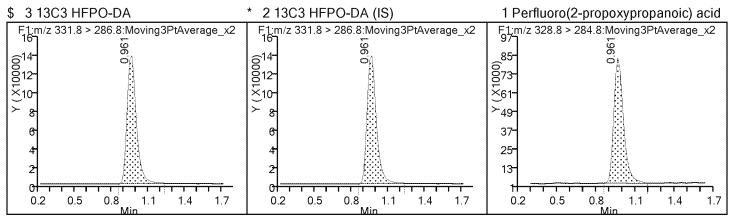
Injection Date: 12-Feb-2018 14:37:48 Instrument ID: LC\_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 48

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404642/55 Calibration Date: 02/12/2018 15:00

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B12088.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.156		10.8	10.0	8.4	20.0
13C3 HFPO-DA	Ave	74660	68030		9.11	10.0	-8.9	

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12088.d

Lims ID: CCV L6

Client ID:

Sample Type: CCV

Inject. Date: 12-Feb-2018 15:00:26 ALS Bottle#: 7 Worklist Smp#: 55

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L6

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:47:29

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags		
\$ 3 13C3 HFPC		4 0 4 5	0.004	1 000	22222	0.44	10.10			
331.8 > 286.8	0.961	1.045	-0.084	1.000	680298	9.11	1049			
* 2 13C3 HFPO 331.8 > 286.8	-DA (15) 0.961	1.045	-0.084		680298	10.0	1049			
1 Perfluoro(2-propoxypropanoic) acid										
328.8 > 284.8	0.961	1.056	-0.095	1.000	786627	10.8	181			
Peagents:										

Reagents:

HFPO\_CAL-6\_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12088.d

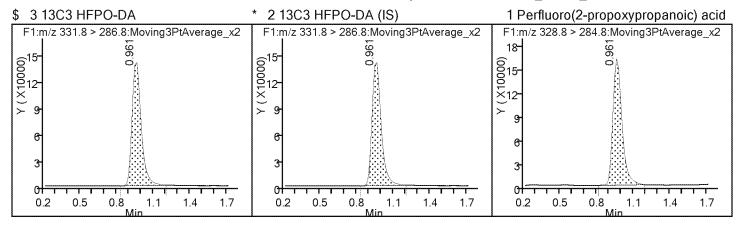
Injection Date: 12-Feb-2018 15:00:26 Instrument ID: LC\_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 55

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404642/66 Calibration Date: 02/12/2018 15:36

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B12099.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	&D	MAX %D
HFPO-DA	Lin1		1.188		5.55	5.00	11.0	20.0
13C3 HFPO-DA	Ave	74660	68296		9.15	10.0	-8.5	

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12099.d

Lims ID: CCV L5

Client ID:

Sample Type: CCV

Inject. Date: 12-Feb-2018 15:36:07 ALS Bottle#: 6 Worklist Smp#: 66

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L5

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:29 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:48:15

	Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
·	13C3 HFPC .8 > 286.8	)-DA 0.961	1.045	-0.084	1.000	682957	9.15	1360		
	13C3 HFPO .8 > 286.8	-DA (IS) 0.961	1.045	-0.084		682957	10.0	1360		
1	Perfluoro(2-p	oropoxyp	ropanoi	c) acid						
328	.8 > 284.8	0.961	1.056	-0.095	1.000	405795	5.55	114		
Da	adante:									

Reagents:

HFPO\_CAL-5\_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12099.d

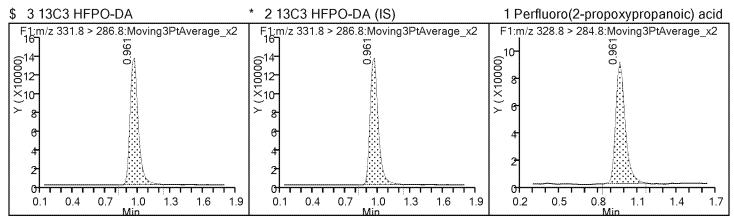
Injection Date: 12-Feb-2018 15:36:07 Instrument ID: LC\_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 66

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404642/73 Calibration Date: 02/12/2018 15:58

Instrument ID: <u>LC\_LCMS7</u> Calib Start Date: 02/08/2018 13:05

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B12106.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.137		10.7	10.0	6.6	20.0
13C3 HFPO-DA	Ave	74660	70494		9.44	10.0	-5.6	

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404643/73 Calibration Date: 02/12/2018 15:58

Instrument ID: <u>LC\_LCMS7</u> Calib Start Date: 02/08/2018 13:05

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B12106.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.137		10.7	10.0	6.6	20.0
13C3 HFPO-DA	Ave	74660	70494		9.44	10.0	-5.6	

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12106.d

Lims ID: CCV L6

Client ID:

Sample Type: CCV

Inject. Date: 12-Feb-2018 15:58:52 ALS Bottle#: 7 Worklist Smp#: 73

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L6

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:13

	Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags		
	\$ 3 13C3 HFPO	-DA									
	331.8 > 286.8	0.947	1.045	-0.098	1.000	704940	9.44	1353			
,	* 2 13C3 HFPO	-DA (IS)									
	331.8 > 286.8	0.947	1.045	-0.098		704940	10.0	1353			
	1 Perfluoro(2-propoxypropanoic) acid										
	328.8 > 284.8	0.961	1.056	-0.095	1.000	801638	10.7	247			
	Doogopte:										

Reagents:

HFPO\_CAL-6\_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12106.d

Lims ID: CCV L6

Client ID:

Sample Type: CCV

Inject. Date: 12-Feb-2018 15:58:52 ALS Bottle#: 7 Worklist Smp#: 73

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L6

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:13

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
3 13C3 HFPC	0-DA 0.947	1.045	-0.098	1.000	704940	9.44	1353		
2 13C3 HFPO 331.8 > 286.8	-DA (IS) 0.947	1.045	-0.098		704940	10.0	1353		
1 Perfluoro(2-p 328.8 > 284.8	oropoxyp 0.961	ropanoi 1.056	c) acid -0.095	1.000	801638	10.7	247		
20.0 - 204.0 200000000	0.501	1.000	0.000	1.000	001000	10.7	<u>~</u> ¬''		

Reagents:

HFPO\_CAL-6\_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12106.d

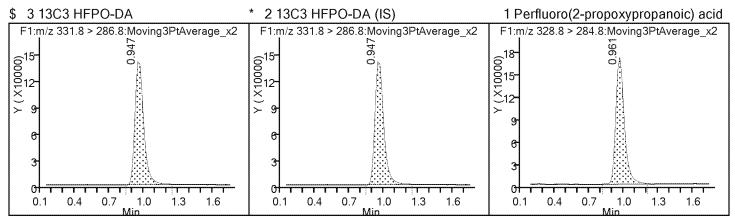
Injection Date: 12-Feb-2018 15:58:52 Instrument ID: LC\_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 73

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12106.d

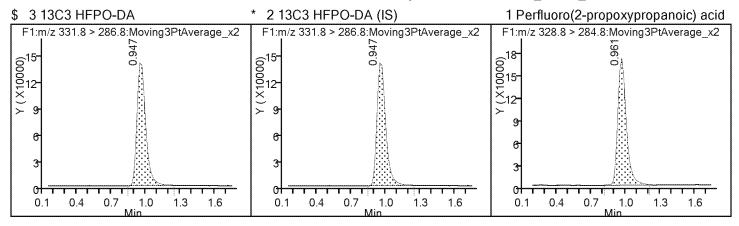
Injection Date: 12-Feb-2018 15:58:52 Instrument ID: LC\_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 73

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404643/84 Calibration Date: 02/12/2018 16:34

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B12117.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.210		5.65	5.00	13.0	20.0
13C3 HFPO-DA	Ave	74660	70731		9.47	10.0	-5.3	

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12117.d

Lims ID: CCV L5

Client ID:

Sample Type: CCV

Inject. Date: 12-Feb-2018 16:34:51 ALS Bottle#: 6 Worklist Smp#: 84

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L5

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:40 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:50:29

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPO 331.8 > 286.8	0-DA 0.947	1.045	-0.098	1.000	707314	9.47	1117		
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 0.947	1.045	-0.098		707314	10.0	1117		
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid						
328.8 > 284.8	0.961	1.056	-0.095	1.000	427805	5.65	125		
Doggonte:									

Reagents:

HFPO\_CAL-5\_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12117.d

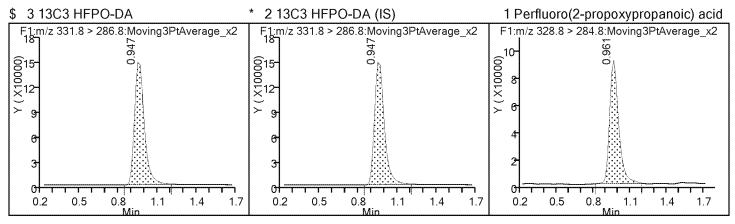
Injection Date: 12-Feb-2018 16:34:51 Instrument ID: LC\_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 84

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404643/94 Calibration Date: 02/12/2018 17:07

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B12127.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.124		10.5	10.0	5.3	20.0
13C3 HFPO-DA	Ave	74660	72113		9.66	10.0	-3.4	

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12127.d

Lims ID: CCV L6

Client ID:

Sample Type: CCV

Inject. Date: 12-Feb-2018 17:07:36 ALS Bottle#: 7 Worklist Smp#: 94

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L6

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:51:26

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPC 331.8 > 286.8	0-DA 0.947	1.045	-0.098	1.000	721133	9.66	1589		
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 0.947	1.045	-0.098		721133	10.0	1589		
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid						
328.8 > 284.8	0.961	1.056	-0.095	1.000	810677	10.5	307		
Doggonte:									

Reagents:

HFPO\_CAL-6\_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12127.d

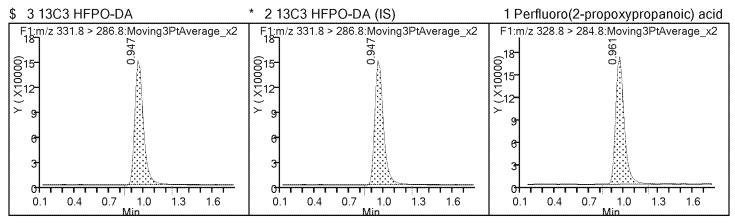
Injection Date: 12-Feb-2018 17:07:36 Instrument ID: LC\_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 94

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404644/102 Calibration Date: 02/12/2018 17:33

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B12135.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.139		5.32	5.00	6.4	20.0
13C3 HFPO-DA	Ave	74660	72416		9.70	10.0	-3.0	

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12135.d

Lims ID: CCV L5

Client ID:

Sample Type: CCV

Inject. Date: 12-Feb-2018 17:33:41 ALS Bottle#: 6 Worklist Smp#: 102

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L5
Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:51:55

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPO 331.8 > 286.8	0-DA 0.947	1.045	-0.098	1.000	724157	9.70	1180		
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 0.947	1.045	-0.098		724157	10.0	1180		
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid						
328.8 > 284.8	0.961	1.056	-0.095	1.000	412435	5.32	112		
Doggonts:									

Reagents:

HFPO\_CAL-5\_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12135.d

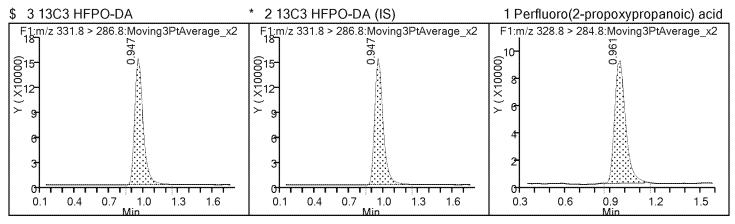
Injection Date: 12-Feb-2018 17:33:41 Instrument ID: LC\_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 102

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404644/111 Calibration Date: 02/12/2018 18:02

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B12144.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.166		10.9	10.0	9.3	20.0
13C3 HFPO-DA	Ave	74660	71421		9.57	10.0	-4.3	

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12144.d

Lims ID: CCV L6

Client ID:

Sample Type: CCV

Inject. Date: 12-Feb-2018 18:02:54 ALS Bottle#: 7 Worklist Smp#: 111

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L6

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:54 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:30

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 F	IFPO-DA							
331.8 > 286	0.947	1.045	-0.098	1.000	714212	9.57	1057	
* 2 13C3 H	FPO-DA (IS)	)						
331.8 > 286	0.947	1.045	-0.098		714212	10.0	1057	
1 Perfluor	o(2-propoxy <sub>l</sub>	propanoi	c) acid					
328.8 > 284	.8 0.961	1.056	-0.095	1.000	832822	10.9	182	
Doogont	o :							

Reagents:

HFPO\_CAL-6\_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12144.d

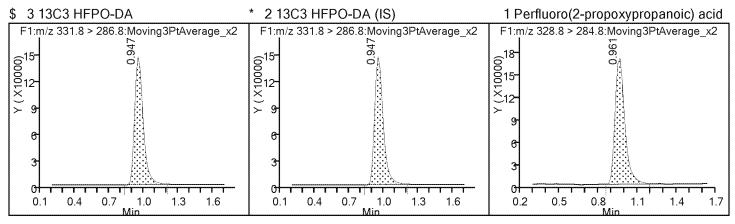
Injection Date: 12-Feb-2018 18:02:54 Instrument ID: LC\_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 111

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404644/118 Calibration Date: 02/12/2018 18:25

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B12151.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.159		5.42	5.00	8.3	20.0
13C3 HFPO-DA	Ave	74660	73099		9.79	10.0	-2.1	

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12151.d

Lims ID: CCV L5

Client ID:

Sample Type: CCV

Inject. Date: 12-Feb-2018 18:25:42 ALS Bottle#: 6 Worklist Smp#: 118

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L5

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:57 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:59

	Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
·	13C3 HFPC								
	.8 > 286.8	0.947	1.045	-0.098	1.000	730985	9.79	1304	
	13C3 HFPO .8 > 286.8	0.947	1.045	-0.098		730985	10.0	1304	
1	Perfluoro(2-	propoxyp	ropanoi	c) acid					
	.8 > 284.8	0.961	1.056	-0.095	1.000	423781	5.42	144	

Reagents:

HFPO\_CAL-5\_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12151.d

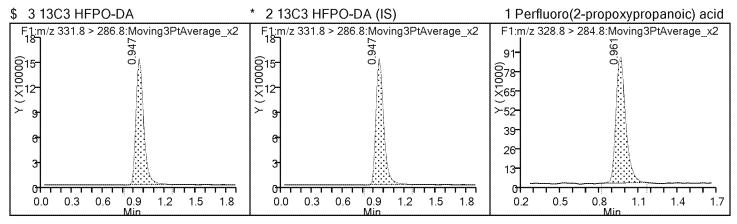
Injection Date: 12-Feb-2018 18:25:42 Instrument ID: LC\_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 118

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404879/61 Calibration Date: 02/13/2018 12:23

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B13082.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.167		5.45	5.00	9.0	20.0
13C3 HFPO-DA	Ave	74660	71530		9.58	10.0	-4.2	

Report Date: 14-Feb-2018 07:00:30 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13082.d

Lims ID: CCV L5

Client ID:

Sample Type: CCV

Inject. Date: 13-Feb-2018 12:23:08 ALS Bottle#: 6 Worklist Smp#: 61

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L5

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera Date: 14-Feb-2018 06:58:18

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPO									
331.8 > 286.8	0.988	1.045	-0.057	1.000	715295	9.58	1164		
* 2 13C3 HFPO	` '	4 0 4 =			745005	40.0			
331.8 > 286.8	0.988		-0.057		715295	10.0	1164		
1 Perfluoro(2-p		-	•						
328.8 > 284.8	1.002	1.056	-0.054	1.000	417302	5.45	102		
Doggonto:									

Reagents:

HFPO\_CAL-5\_00080 Amount Added: 1.00 Units: mL

Report Date: 14-Feb-2018 07:00:31 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13082.d

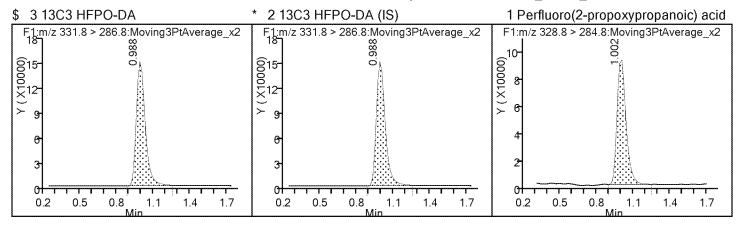
Injection Date: 13-Feb-2018 12:23:08 Instrument ID: LC\_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 61

Injection Vol: 20.0 ul Dil. Factor: 1.0000



# FORM VII LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404879/71 Calibration Date: 02/13/2018 12:55

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B13092.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	&D	MAX %D
HFPO-DA	Lin1		1.158		10.9	10.0	8.5	20.0
13C3 HFPO-DA	Ave	74660	80224		10.7	10.0	7.5	

Report Date: 14-Feb-2018 07:00:41 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13092.d

Lims ID: CCV L6

Client ID:

Sample Type: CCV

Inject. Date: 13-Feb-2018 12:55:31 ALS Bottle#: 7 Worklist Smp#: 71

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L6

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:41 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera Date: 14-Feb-2018 06:58:39

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPO 331.8 > 286.8	0-DA 0.947	1.045	-0.098	1.000	802241	10.7	1399		
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 0.947	1.045	-0.098		802241	10.0	1399		
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid						
328.8 > 284.8	0.947	1.056	-0.109	1.000	929099	10.9	298		
Doogonto:									

Reagents:

HFPO\_CAL-6\_00080 Amount Added: 1.00 Units: mL

Report Date: 14-Feb-2018 07:00:41 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13092.d

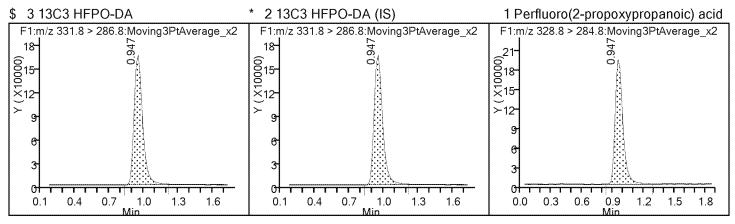
Injection Date: 13-Feb-2018 12:55:31 Instrument ID: LC\_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 71

Injection Vol: 20.0 ul Dil. Factor: 1.0000



# FORM VII LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404879/72 Calibration Date: 02/13/2018 14:06

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B13111.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.071		5.00	5.00	-0.0	20.0
13C3 HFPO-DA	Ave	74660	75215		10.1	10.0	0.7	

Report Date: 14-Feb-2018 07:00:42 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13111.d

Lims ID: CCV L5

Client ID:

Sample Type: CCV

Inject. Date: 13-Feb-2018 14:06:40 ALS Bottle#: 6 Worklist Smp#: 72

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L5

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:41 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera Date: 14-Feb-2018 06:58:41

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPC 331.8 > 286.8	)-DA 0.947	1.045	-0.098	1.000	752145	10.1	1212		
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 0.947	1.045	-0.098		752145	10.0	1212		
1 Perfluoro(2-)	oropoxyp 0.961	ropanoi 1.056	•	1.000	402617	F 00	216		
328.8 > 284.8	0.961	1.056	-0.095	1.000	402617	5.00	210		

Reagents:

HFPO\_CAL-5\_00080 Amount Added: 1.00 Units: mL

Report Date: 14-Feb-2018 07:00:42 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13111.d

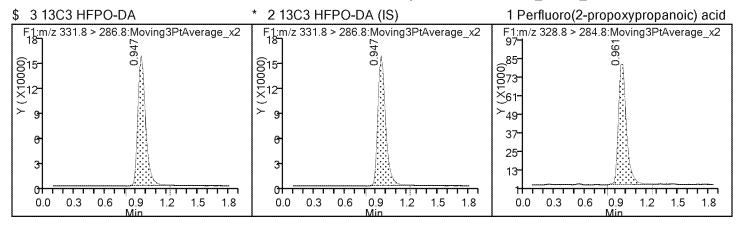
Injection Date: 13-Feb-2018 14:06:40 Instrument ID: LC\_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 72

Injection Vol: 20.0 ul Dil. Factor: 1.0000



# FORM VII LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404879/80 Calibration Date: 02/13/2018 14:32

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B13119.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	&D	MAX %D
HFPO-DA	Lin1		1.065		9.98	10.0	-0.2	20.0
13C3 HFPO-DA	Ave	74660	80391		10.8	10.0	7.7	

Report Date: 14-Feb-2018 07:00:49 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13119.d

Lims ID: CCV L6

Client ID:

Sample Type: CCV

Inject. Date: 13-Feb-2018 14:32:48 ALS Bottle#: 7 Worklist Smp#: 80

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L6
Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera Date: 14-Feb-2018 06:58:58

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPC 331.8 > 286.8	)-DA 0.947	1.045	-0.098	1.000	803910	10.8	1271		
* 2 13C3 HFPO 331.8 > 286.8	DA (IS) 0.947	1.045	-0.098		803910	10.0	1271		
1 Perfluoro(2-		-	•	1 000	056000	0.00	221		
328.8 > 284.8	0.947	1.056	-0.109	1.000	856029	9.98	221		

Reagents:

HFPO\_CAL-6\_00080 Amount Added: 1.00 Units: mL

Report Date: 14-Feb-2018 07:00:49 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13119.d

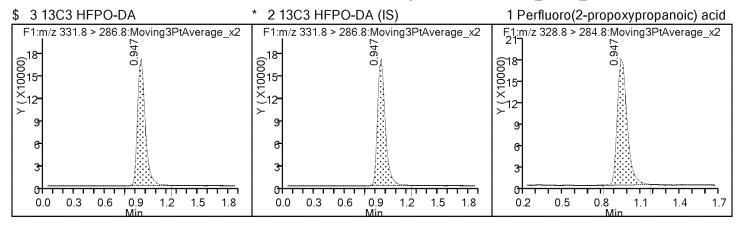
Injection Date: 13-Feb-2018 14:32:48 Instrument ID: LC\_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 80

Injection Vol: 20.0 ul Dil. Factor: 1.0000



# FORM VII LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-404879/91 Calibration Date: 02/13/2018 15:08

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B13130.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	&D	MAX %D
HFPO-DA	Lin1		1.072		5.00	5.00	0.0	20.0
13C3 HFPO-DA	Ave	74660	85048		11.4	10.0	13.9	

Report Date: 14-Feb-2018 07:01:00 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13130.d

Lims ID: CCV L5

Client ID:

Sample Type: CCV

Inject. Date: 13-Feb-2018 15:08:43 ALS Bottle#: 6 Worklist Smp#: 91

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L5

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:01:00 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera Date: 14-Feb-2018 06:59:21

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPO	-DA								
331.8 > 286.8	0.947	1.045	-0.098	1.000	850479	11.4	1385		
* 2 13C3 HFPO	-DA (IS)								
331.8 > 286.8	0.947	1.045	-0.098		850479	10.0	1385		
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid						
328.8 > 284.8	0.961	1.056	-0.095	1.000	455779	5.00	144		
Dagagne									

Reagents:

HFPO\_CAL-5\_00080 Amount Added: 1.00 Units: mL

Report Date: 14-Feb-2018 07:01:00 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13130.d

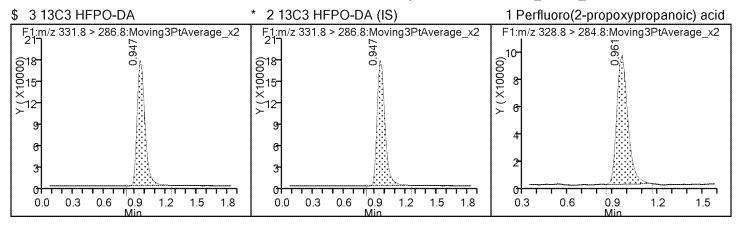
Injection Date: 13-Feb-2018 15:08:43 Instrument ID: LC\_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 91

Injection Vol: 20.0 ul Dil. Factor: 1.0000



# FORM VII LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-405022/7 Calibration Date: 02/14/2018 08:00

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B14007.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.048		4.89	5.00	-2.2	20.0
13C3 HFPO-DA	Ave	74660	80194		10.7	10.0	7.4	

Report Date: 15-Feb-2018 06:58:45 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14007.d

Lims ID: CCV L5

Client ID:

Sample Type: CCV

Inject. Date: 14-Feb-2018 08:00:33 ALS Bottle#: 6 Worklist Smp#: 7

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L5

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:28

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFP0	D-DA								
331.8 > 286.8	0.947	1.045	-0.098	1.000	801944	10.7	1369		
* 2 13C3 HFPC	D-DA (IS)								
331.8 > 286.8	0.947	1.045	-0.098		801944	10.0	1369		
1 Perfluoro(2-	propoxyp	ropanoi	c) acid						
328.8 > 284.8	0.961	1.056	-0.095	1.000	420148	4.89	128		
Peagents.									

Reagents:

HFPO\_CAL-5\_00080 Amount Added: 1.00 Units: mL

Report Date: 15-Feb-2018 06:58:45 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14007.d

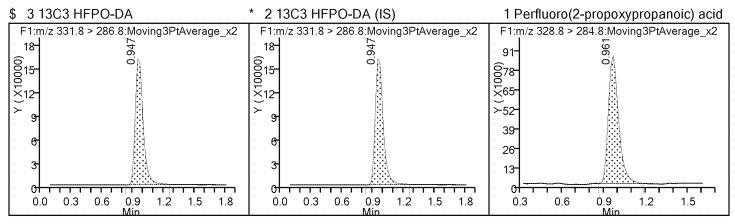
Injection Date: 14-Feb-2018 08:00:33 Instrument ID: LC\_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 7

Injection Vol: 20.0 ul Dil. Factor: 1.0000



# FORM VII LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-405022/18 Calibration Date: 02/14/2018 08:36

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B14018.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.072		5.00	5.00	0.0	20.0
13C3 HFPO-DA	Ave	74660	84197		11.3	10.0	12.8	

Report Date: 15-Feb-2018 06:58:50 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14018.d

Lims ID: CCV L5

Client ID:

Sample Type: CCV

Inject. Date: 14-Feb-2018 08:36:31 ALS Bottle#: 6 Worklist Smp#: 18

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L5

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:55:33

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPO		4 0 4 5	0.000	4 000	0.14070	44.0	4504	
331.8 > 286.8 * 2 13C3 HFPO	0.947	1.045	-0.098	1.000	841972	11.3	1594	
331.8 > 286.8	0.947	1.045	-0.098		841972	10.0	1594	
1 Perfluoro(2-p	oropoxyp	ropanoi	c) acid					
328.8 > 284.8	0.947	1.056	-0.109	1.000	451105	5.00	139	
Doggonte:								

Reagents:

HFPO\_CAL-5\_00080 Amount Added: 1.00 Units: mL

Report Date: 15-Feb-2018 06:58:51 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14018.d

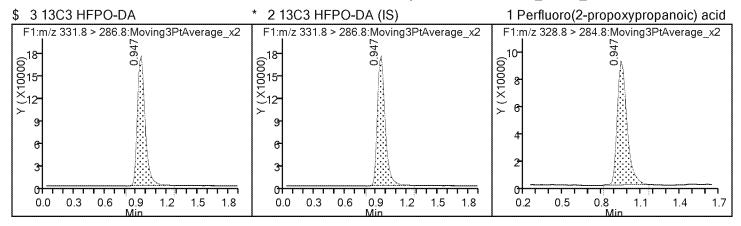
Injection Date: 14-Feb-2018 08:36:31 Instrument ID: LC\_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 18

Injection Vol: 20.0 ul Dil. Factor: 1.0000



# FORM VII LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Lab Sample ID: CCV 280-405022/28 Calibration Date: 02/14/2018 09:09

GC Column: Synergi Hydro ID: Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B14028.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	용D	MAX %D
HFPO-DA	Lin1		1.079		10.1	10.0	1.1	20.0
13C3 HFPO-DA	Ave	74660	80964		10.8	10.0	8.4	

Report Date: 15-Feb-2018 06:58:56 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14028.d

Lims ID: CCV L6

Client ID:

Sample Type: CCV

Inject. Date: 14-Feb-2018 09:09:04 ALS Bottle#: 7 Worklist Smp#: 28

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: CCV L6

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Sublist: chrom-HFPO\*sub1

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:56 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:55:54

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPO 331.8 > 286.8	0-DA 0.947	1.045	-0.098	1.000	809643	10.8	1438		
* 2 13C3 HFPO 331.8 > 286.8	-DA (IS) 0.947	1.045	-0.098		809643	10.0	1438		
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid						
328.8 > 284.8	0.947	1.056	-0.109	1.000	873557	10.1	205		
Deagente:									

Reagents:

HFPO\_CAL-6\_00080 Amount Added: 1.00 Units: mL

Report Date: 15-Feb-2018 06:58:56 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14028.d

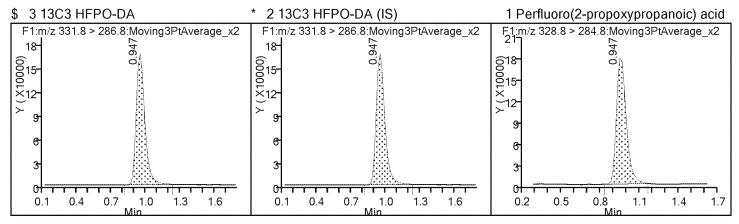
Injection Date: 14-Feb-2018 09:09:04 Instrument ID: LC\_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 28

Injection Vol: 20.0 ul Dil. Factor: 1.0000



### Waters Xevo TQ MS Detector Tune Parameters - MassLynx 4.1 8CN 843

Page 1 of 2

Flex

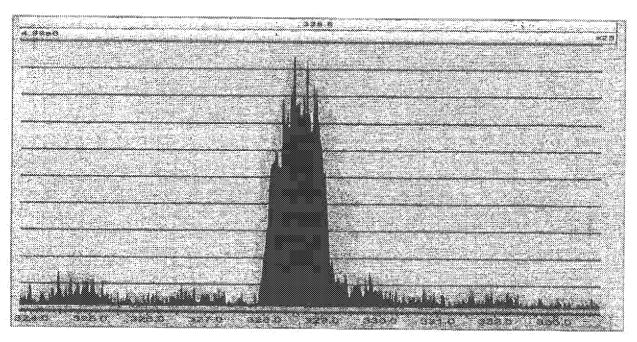
C:WessLynx\8321.PRO\ACQUDBWFPOMRM.ipr

Instrument:

XEVO-TQM8#VBA463

Printed:

Monday, February 12, 2018 09:32:00 Mountain Standard Time



MS1 Scan  Source (E8-)  Capillary (kV)  Capillary (kV)  Cone (V)  Cone (V)  Source Temperature (°C)  Descivation Temperature (°C)  Cone Gas Flow (L/Hr)  Collision Gas Flow (L/Hr)  Collision Gas Flow (mL/Min)  Analyser  LM 1 Resolution  IM Shode Collision Energy  MS Mode Entrance  Gas On MS Mode Entrance  Gas On MS Mode Entrance  Gas On MSMS Mode Entrance  Gas Off MSM	***			
Source (ES-) Capiliary (kV) Cons (V) 10.00 -21,08 Extractor (V) 3.00 -10.61 Source Temperature (°C) 120 117 Desolvation Temperature (°C) Cone Gas Flow (L/Hr) Desolvation Gas Flow (L/Hr) Coillaion Gas Flow (L/Hr) Coillaion Gas Flow (MI/Min)  Analyser LM 1 Resolution LM 1	Type MS1 Scan	Start Mass		Set Mass
Capillary (kV) Cons (V) Cons (	1417 ( MM11)	3£3.0V	<b>333.00</b>	
Capillary (kV)	Source (ES-)	Settinge	Readbacks	
Extractor (V) Source Temperature (°C) Source Temperature (°C) Desolvation Temperature (°C) Cone Gas Flow (L/Hr) Desolvation Gas Flow (L/Hr) So Collision Gas Flow (L/Hr) Collision Gas Flow (mL/Min)  Analyser LM 1 Resolution LM 1 Resolution Source LM 1 Resolution In Energy 1 MS Mode Collision Energy MSMS Mode Collision Energy MSMS Mode Collision Energy MS Mode Entrance Source MS Mode Exit Source Gas On MS Mode Entrance Gas On MS Mode Exit Gas On MSMS Mode Entrance Gas On MSMS Mode Exit Gas Off MS Mode Exit Gas Off MS Mode Exit Gas Off MS Mode Exit Gas Off MSMS Mode Exit Gas Off M		0.50	0.63	
Source Temperature (°C) 120 117 Desolvation Temperature (°C) 200 200 Cone Gas Flow (L/Hr) 50 51 Desolvation Gas Flow (L/Hr) 800 791 Collision Gas Flow (mL/Min) 0.15 0.04  Analyser 8ettings Readbacks LM 1 Resolution 14.8 Ion Energy 1 0.7 MS Mode Collision Energy 7.00 MSMS Mode Collision Energy 20.00 MS Mode Entrance 0.50 MS Mode Exit 0.50 Ges On MS Mode Entrance 0.50 Ges On MS Mode Entrance 0.50 Ges On MS Mode Entrance 0.50 Ges On MSMS Mode Exit 0.50 Ges On MSMS Mode Exit 0.50 Ges On MSMS Mode Exit 0.50 Ges Off MS Mode Exit 0.50 Ges Off MSMS Mode Exit 0.50			-21.00	
Desolvation Temperature (°C) 200 200 Cone Gas Flow (L/Hr) 50 51 Desolvation Gas Flow (L/Hr) 800 791 Collision Gas Flow (mL/Min) 0.15 0.04  Analyser 8ettings Resolution LM 1 Resolution 14.8 Ion Energy 1 0.7 MS Mode Collision Energy 7.00 MSMS Mode Collision Energy 20.00 MS Mode Collision Energy 20.00 MS Mode Exit 0.50 Gas On MS Mode Entrance 0.50 Gas On MS Mode Exit 0.50 Gas On MSMS Mode Exit 2.00 Gas Off MS Mode Exit 30.00 Gas Off MS Mode Exit 2.00 Gas Off MSMS Mode Exit 2.00 ScanWave MS Mode Entrance 0.50	Extractor (V)			
Cone Gas Flow (L/Hr) Desolvation Gas Flow (L/Hr) Collision Gas Flow (mL/Min)  Analyser LM 1 Resolution HM 1 Resolution In Energy 1 MS Mode Collision Energy MSMS Mode Collision Energy MSMS Mode Collision Energy MSMS Mode Entrance MS Mode Exit Gas On MS Mode Entrance Gas On MS Mode Exit Gas On MS Mode Exit Gas On MSMS Mode Entrance Gas On MSMS Mode Exit Gas Off MS Mode Exit Gas Off MS Mode Exit Gas Off MSMS Mode Exit Gas	Source Temperature (*C)			
Desolvation Gas Flow (L/Hr) 800 791 Collision Gas Flow (mL/Min) 0.15 0.04  Analyser Settings Readbacks LM 1 Resolution 2.8 HM 1 Resolution 14.8 Ion Energy 1 0.7 MS Mode Collision Energy 7.00 MSMS Mode Collision Energy 20.00 MS Mode Entrance 0.60 MS Mode Exit 0.50 Gas On MS Mode Exit 0.60 Gas On MS Mode Exit 0.60 Gas On MSMS Mode Exit 0.60 Gas On MSMS Mode Exit 0.50 Gas On MSMS Mode Exit 0.50 Gas On MSMS Mode Exit 0.50 Gas Off MS Mode Exit 0.50 Gas Off MSMS Mode Exit 2.00 Gas Off MSMS Mode Exit 2.00 ScanWave MS Mode Entrance 0.50	Desdyation Temperature (°C)			
Collision Gas Flow (mL/Min)  Analyser  LM 1 Resolution  14.8 Ion Energy 1  MS Mode Collision Energy  MSMS Mode Collision Energy  MS Mode Entrance  MS Mode Exit  Gas On MS Mode Entrance  Gas On MS Mode Exit  Gas On MSMS Mode Exit  Gas On MSMS Mode Entrance  Gas On MSMS Mode Exit  Gas Off MS Mode Exit  Gas Off MSMS Mode Entrance  Gas Off MSMS Mode Exit  Gas Off MSMS Mode Exit  Gas Off MSMS Mode Entrance  Gas Off MSMS Mode Exit  Collision  Gas Off MSMS Mode Entrance  Collision  Gas Off MSMS Mode Exit  Collision  Gas Off MSMS Mode Entrance  Collision  Gas Off MSMS Mode Exit  Collision  Collisio				
Analyser LM 1 Resolution HM 1 Resolution 14.8 Ion Energy 1 0.7 MS Mode Collision Energy 7.00 MSMS Mode Collision Energy 20.00 MS Mode Entrance 0.60 MS Mode Exit 0.60 Gas On MS Mode Entrance 0.60 Gas On MS Mode Exit 0.50 Gas On MSMS Mode Entrance 0.50 Gas On MSMS Mode Entrance 0.50 Gas On MSMS Mode Exit 0.50 Gas On MSMS Mode Exit 0.50 Gas On MSMS Mode Exit 0.50 Gas Off MS Mode Exit 0.50 Gas Off MSMS Mode Exit 0.50 Gas Off MSMS Mode Exit 0.50				
LM 1 Resolution 2.8 HM 1 Resolution 14.8 Ion Energy 1 0.7 MS Mode Collision Energy 7.00 MSMS Mode Collision Energy 20.00 MS Mode Entrance 0.60 MS Mode Exit 0.60 Gas On MS Mode Entrance 0.60 Gas On MS Mode Exit 0.60 Gas On MSMS Mode Exit 0.60 Gas On MSMS Mode Exit 0.50 Gas On MSMS Mode Exit 0.50 Gas Off MS Mode Exit 0.50 Gas Off MSMS Mode Exit 0.50 Gas Off MSMS Mode Exit 0.50 Gas Off MSMS Mode Entrance 0.50	William Gas Low (Lithwill)	U.10	O.V4	
LM 1 Resolution 14.8  Ion Energy 1 0.7  MS Mode Collision Energy 7.00  MSMS Mode Collision Energy 20.00  MS Mode Entrance 0.60  MS Mode Exit 0.60  Gas On MS Mode Entrance 0.60  Gas On MS Mode Exit 0.50  Gas On MSMS Mode Exit 0.50  Gas On MSMS Mode Exit 0.50  Gas On MSMS Mode Exit 0.50  Gas Off MS Mode Exit 0.50  Gas Off MSMS Mode Exit 0.50  Gas Off MSMS Mode Entrance 0.50  Gas Off MSMS Mode Exit 0.50	Analyser	Settinus	Readbacks	
lon Energy 1 0.7  MS Mode Collision Energy 7.00  MSMS Mode Collision Energy 20.00  MS Mode Entrance 0.80  MS Mode Exit 0.50  Gas On MS Mode Entrance 0.50  Gas On MS Mode Exit 0.80  Gas On MSMS Mode Entrance 0.60  Gas On MSMS Mode Entrance 0.50  Gas On MSMS Mode Exit 0.50  Gas Off MS Mode Exit 0.50  Gas Off MS Mode Exit 0.50  Gas Off MS Mode Exit 2.00  Gas Off MSMS Mode Entrance 2.00  Gas Off MSMS Mode Exit 2.00  ScanWave MS Mode Entrance 0.50	LM 1 Resolution		w was an an 10, 101 (01, 01, 00, 00)	
MS Mode Collision Energy 7.00 MSMS Mode Collision Energy 20.00 MS Mode Entrance 0.60 MS Mode Exit 0.60 Gas On MS Mode Entrance 0.60 Gas On MS Mode Exit 0.60 Gas On MSMS Mode Entrance 0.60 Gas On MSMS Mode Exit 0.50 Gas Off MS Mode Exit 2.00 Gas Off MSMS Mode Exit 2.00 ScanWave MS Mode Entrance 0.50				
MSMS Mode Collision Energy 20,00 MS Mode Entrance 0.50 MS Mode Exit 0.50 Gas On MS Mode Entrance 0.50 Gas On MS Mode Exit 0.50 Gas On MSMS Mode Entrance 0.50 Gas On MSMS Mode Exit 0.50 Gas Off MS Mode Exit 0.50 Gas Off MS Mode Exit 0.50 Gas Off MS Mode Entrance 30,00 Gas Off MS Mode Exit 30,00 Gas Off MS Mode Entrance 2.00 Gas Off MSMS Mode Exit 2.00 ScanWave MS Mode Entrance 0.50	Ion Energy 1			
MS Mode Entrance 0.60 MS Mode Exit 0.60 Gas On MS Mode Entrance 0.60 Gas On MS Mode Exit 0.60 Gas On MSMS Mode Entrance 0.60 Gas On MSMS Mode Exit 0.50 Gas On MSMS Mode Exit 0.50 Gas Off MS Mode Exit 0.50 Gas Off MS Mode Exit 0.50 Gas Off MS Mode Entrance 30.00 Gas Off MS Mode Exit 30.00 Gas Off MSMS Mode Entrance 2.00 Gas Off MSMS Mode Exit 2.00 ScanWave MS Mode Entrance 0.50	MS Mode Collision Energy	7.00		
MS Mode Exit 0.50 Gas On MS Mode Entrance 0.50 Gas On MS Mode Exit 0.50 Gas On MSMS Mode Entrance 0.50 Gas On MSMS Mode Exit 0.50 Gas On MSMS Mode Exit 0.50 Gas Off MS Mode Exit 30.00 Gas Off MS Mode Exit 30.00 Gas Off MSMS Mode Entrance 2.00 Gas Off MSMS Mode Entrance 2.00 Gas Off MSMS Mode Exit 2.00 ScanWave MS Mode Entrance 0.50		20.00		
Ges On MS Mode Entrance 0.50 Ges On MS Mode Exit 0.50 Ges On MSMS Mode Entrance 0.50 Ges On MSMS Mode Edit 0.50 Ges Off MS Mode Edit 0.50 Ges Off MS Mode Exit 30.00 Ges Off MS Mode Exit 30.00 Ges Off MSMS Mode Entrance 2.00 Ges Off MSMS Mode Exit 2.00 ScanWave MS Mode Entrance 0.50	2 5 5 7 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.80		
Gas On MS Mode Exit 0,50 Gas On MSMS Mode Entrance 0,50 Gas On MSMS Mode Exit 0,50 Gas Off MS Mode Entrance 30,00 Gas Off MS Mode Exit 30,00 Gas Off MSMS Mode Entrance 2,00 Gas Off MSMS Mode Exit 2,00 ScanWave MS Mode Entrance 0,50				
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Ges Off MS Mode Entrance 30.00 Ges Off MS Mode Exit 30.00 Ges Off MSMS Mode Entrance 2.00 Ges Off MSMS Mode Exit 2.00 ScanWave MS Mode Entrance 0.50				
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Gas Off MSMS Mode Entrance 2.00 Ges Off MSMS Mode Exit 2.00 ScanWave MS Mode Entrance 0.50				
Ges Off MSMS Mode Exit 2.00 ScanWave MS Mode Entrance 0.50				
ScanWave MS Mode Entrance 0.50				
M 104				
COMITY BY BY MODE EXIT				
Control Second Section Control of the Control of th				
Soan/Veve MSMS Mode Entrance 0.50				
ScanWave MSMS Mode Exit 0,50 LM 2 Resolution 2.9				
N had all all all all all all all all all a				
9 2000 Au				
lon Energy 2 0.3	tous a soon again 1993. We	V.Q		

Thaneam f. Wilaita Waters Xevo TQ M6 Detector Tune Parameters - MassLynx 4.1 8CN 843

Page 2 of 2

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Instrument

XEVO-TQM9#VBA453

Printed:

Monday, February 12, 2018 09:32:00 Mountain Standard Time

Multiplier

623.81

Active Reservoir

Pressure Geuges Collision Cell Pressure (mbar)

7.830201e-005

Instrument Configuration

Automatic Mode

0.008

MS Inter-scan delay (secs) 0.00 Polarity/Mode switch Inter-scan delay (secs)

Enhanced Inter-scan delay (secs)

0.020 0.020

Inter-channel delay - See Tables MS 1 Delay Table:

R delay <= 0.500 0.005

<= 2.000 0.008

<= 4.000 0.010

**4** 11.000 0.012

> 11.000 0.014

MS 2 Delay Table:

- Thanesin f. az/us/m

### Waters Xevo TQ MS Detector Tune Paremeters - MassLynx 4.1 SCN 843

Page 1 of 2

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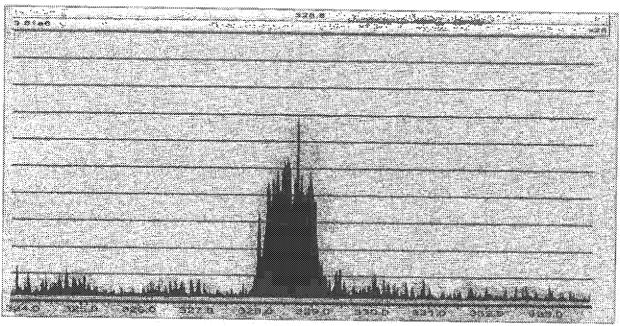
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Instrument

XEVO-TOMO#VBA468

Printed:

Monday, February 12, 2018 10:17:43 Mountain Standard Time



lype	Start Mass	End Mass	Set Mass
<b>491 Scan</b>	323.80	333.80	AC 40.00 9.000 0000000.00
lource (ES-)	3ettingis	Readbacks	
Daplilary (KV)	0.50	0.53	
Xone (V)	10.00	-21.00	
Extractor (V)	3.00	-10.61	
iource Temperature (°C)	120	120	
Peschetton Temperature (°C)	200	200	
one Gas Flow (L/Hr)	<b>60</b>	49	
Sesolvation Ges Flow (L/Hr)	800	792	
Collision Gas Flow (mL/Min)	0.18	0.04	
<b>umlyeer</b>	Settinge	Readbacks	
M 1 Resolution	2.8		
IM 1 Resolution	14.8		
on Energy 1	0.7		
18 Mode Collision Energy	7.00		
ISMS Mode Collision Energy	20.00		
<b>IS Mode Entrance</b>	0.60		
IS Mode Exit	0.50		
les On MS Mode Entrance	0.50		
Mass On MS Mode Exit	0.80		
es On MSMS Mode Entrance	0. <u>50</u>		
las On MSMS Mode Exit	0.80		
les Off MS Mode Entrance	30.00		
las Off MS Mode Exit	30.00		
as Off MSMS Mode Entrance	200		
las Off MSMS Mode Exit	2.00		
canWeve MS Mode Entrance	0.50		
cenVeve MS Mode Exit	0.60		
cenVave MSMS Mode Entrance	0.50		
cenVeve MSMS Mode Exit	0.50		
M 2 Resolution	2.9		
M 2 Resolution	14.7		

Thaneeskif.

Waters Xevo TQ MS Detector Tune Parameters - MassLynx 4.1 SCN 843

Pege 2 of 2

File:

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Instrument:

XEVO-TQM6#VBA463

Printed:

Monday, February 12, 2018 10:17:43 Mountain Standard Time

Multiplier

623.81

Active Reservoir

Pressure Gauges

Collision Cell Pressure (mbar)

7.880201e-005

Instrument Configuration

Automatic Mode

0.005

MS Inter-ecan delay (secs) Polarity/Mode switch inter-scan delay (secs)

0.020

Enhanced Inter-scan delay (secs)

0.020

Inter-channel delay - See Tablee MS 1 Delay Table: R delay <= 0.500 0.005

<= 2.000 0.008

<= 4.000 0.010

<= 11.000 0.012

> 11.000 0.014

MS 2 Delay Table:

R delay <= 8.000 0.005 <= 25.000 0.005 > 25.000 0.007

#### MS Method Report - MassLynx 4.1 SCN 843

Page 1 of 1

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Printed:

Monday, February 12, 2016 14:22:03 Mountain Standard Time

Creation Time Fri 18 Nov 2016 09:08:40 Instrument Identifier XEVO-TQM9#VBA468

Version Number 1.0 Duration (min) 2.0

Calibration Filename C:\MessLynx\intelliStart\Results\Unit Mass Resolution\Calibration\_20100811

2.cal Solvent Dalay Divert Valve Enabled 0 **Number Of Functions** 4

#### Function 1: MRM of 2 mass pairs, Time 0.00 to 2.00, ES-

Type MRM Ion Mode ES. Inter Channel Delay (sec) -1.000 InterScan Time (sec) -1.000 Spen (De) 0.6 Start Time (min) 0.0

End Time (min)

Ch Prnt(Da) Dau(Da) Dwell(s) Cone(V) Coll(eV) Delay(s) Compound

1 328.80 284.80 0.400 10.00 7.00 -1.000 EFFO

2 331.80 286.80 0.400 10.00 7.00 -1.000 HFFO IS

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### Waters Xevo TQ M8 Detector Tune Parameters - MassLynx 4.1 8CN 843

Page 1 of 2

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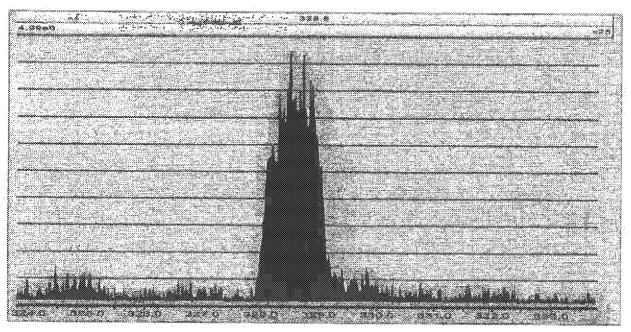
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instrument:

XEVO-TOMBR/BA463

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Monday, February 12, 2018 09:32:00 Mountain Standard Time



1ype MS1 Soan	Start Mass 323.80	End <b>Mass</b> 333.60	841 1111110
		200,000,276,×200,000	
Source (E9-)	Cottings	Readbacks	
Capillary (kV)	0.50	0.63	
Cone (V)	10.00	-21.00	
Extractor (V)	3.00	-10.61	
Source Temperature (*C)	120	117	
Desolvation Temperature (°C)	200	200	
Cone Gee Flow (L/Hr)	50	51	
Desolvation Gas Flow (L/Hr)	800	701	
Collision Gas Flow (mL/Min)	0.15	0.04	
Analyser	Settings	Readbacks	
LM 1 Resolution	2.8	×	
HM 1 Resolution	14.8		
ion Energy 1	0.7		
MS Mode Colleion Energy	7.00		
MSMS Mode Colleion Energy	20.00		
MS Mode Entrance	0.80		
MS Mode Exit	0.60		
Gas On MS Mode Entrance	0.50		
Gee On MS Mode Exit	0.60		
Gas On MSMS Mode Entrance	0.80		
Gas On MSMS Mode Exit	0.50		
Gas Off MS Mode Entrance	30.00		
Ges Off MS Mode Exit	30.00		
Gea Off MSMS Mode Entrance	2.00		
Ges Off MSMS Mode Exit	2.00		
ScanWave MS Mode Entrance	0.50		
ScanWave MS Mode Exit	0.50		
SoanWave MSMS Mode Entrance	0.50		
ScanWave MSMS Mode Exit	0.50		
LM 2 Resolution	2.9		
HM 2 Resolution	14.7		
ion Energy 2	0.3		

12/14/14

Waters Xevo TQ MS Detector Tune Parameters - MaseLynx 4.1 SCN 843

Page 2 of 2

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Instrument

XEVO-TQM8#VBA463

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Mondey, February 12, 2018 09:32:00 Mountain Standard Time

**Multiplier** 

623.81

Active Reservoir

Pressure Gauges Collision Cell Pressure (mbar)

7.830201e-005

Instrument Configuration

Autometio Mode

0.006

MS Inter-scan delay (secs) 0.00 Polarity/Mode switch Inter-scan delay (secs) Enhanced inter-scan delay (secs)

0.020 0.020

Inter-channel delay - See Tables MS 1 Delay Table:

R delay <= 0.500 0.005

<= 2.000 0.008

<= 4.000 0.010

<= 11.000 0.012

> 11.000 0.014

MS 2 Delay Table:

R delay

### Waters Xevo TQ MS Detector Tune Parameters - MassLynx 4.1 SCN 843

Page 1 of 2

File:

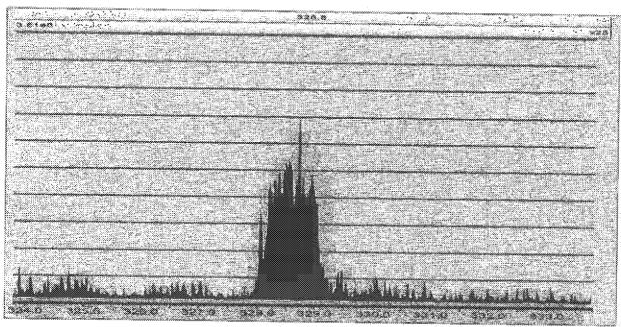
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Instrument

XEVO-TQMS#VBA453

Printed:

Monday, February 12, 2018 10:17:43 Mountain Standard Time



<b>Type</b> VS1 Scan	Start Mass	End Mass	Set Mas
wa i oran	323.80	333.80	
Source (ES-)	Settings	Roadback	
Capillary (KV)	0.50	0.63	
Cone (V)	10.00	-21.06	
Extraction (V)	3.00	-10.81	
Source Temperature (°C)	120	120	
Desolvation Temperature (°C)	200	200	
Cone Gas Flow (L/Hr)	60	49	
Desolvation Gas Flow (L/Hr)	800	782	
Collision Gas Flow (mL)Min)	0.15	0.04	
<b>Valyser</b>	Settings	Readbacks	
M 1 Resolution	2.8		
IM_1 Resolution	14.8		
on Energy 1	0.7		
4S Mode Collision Energy	7.00		
ASMS Mode Collision Energy	20.00		
<b>AS Mode Entrance</b>	0.80		
AS Mode Exit	0.50		
3es On M8 Mode Entrance	0.60		
3ee On MS Mode Exit	0.60		
3es On MSMS Mode Entrance	0.80		
300 On MSMS Mode Exit	0.80		
Sea Off MS Mode Entrance	30.00		
See Off MS Mode Exit	30.00		
Bas Off MSMS Mode Entrance	2.00		
Bas Off MSMS Mode Exit	2.00		
CenVave MS Mode Entrance	0.50		
canVeve MS Mode Exit	0.60		
CanVave MSMS Mode Entrance	0.50		
cenVave MSM8 Mode Exit	0.50		
M 2 Readution	2.0		
IM 2 Resolution	14.7		
on Energy 2	0.3		

Aving Allelis Waters Xevo TQ M8 Detector Tune Parameters - MassLynx 4.1 SCN 843

Page 2 of 2

File:

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instrument:

XEVO-TOMO#VBA453

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Monday, February 12, 2018 10:17:43 Mountain Standard Time

Multiplier

623.81

Active Reservoir

Pressure Gauges Collision Cell Pressure (mbar)

7.830201e-005

Instrument Configuration

**Automatic Mode** 

MS Inter-ecan delay (sece) 0.005

Polarity/Mode switch inter-scan delay (sece) Enhanced inter-scan delay (secs)

0.020 0.020

Inter-channel delay - See Tables
MS 1 Delay Table:
R delay

<= 0.800 0.008

<= 2.000 0.008

<= 4.000 0.010

<= 11.000 0.012

> 11.000 0.014

MS 2 Delay Table:

R delay <= 8.000 0.005 <= 25.000 0.005

> 25.000 0.007

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#### MS Method Report - MassLynx 4.1 SCN 843

Page 1 of 1

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Printed:

Monday, February 12, 2018 14:22:03 Mountain Standard Time

Creation Time Instrument Identifier

Fri 18 Nov 2016 09:08:40 XEVO-TQMS#V8A463

Version Number **Duration (min)** 

1.0 2.0

Calbraton Flename

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0

\_2.cel Solvent Delay Divert Valve Enabled Number Of Functions

#### Function 1: MRM of 2 mass pairs, Time 0.00 to 2,00, 28-

Type MRM lon Mode ES. Inter Channel Delay (sec) -1.000 InterScan Time (eec) -1.000 Span (Da) Start Time (min) 0.5 0.0

End Time (min)

Ch Prnt(Da) Dau(Da) Dwell(a) Cons(V) Coll(aV) Delay(a) Compound

O 400 10.00 7.00 -1.000 HFFO 1 328.80 284.80 0.400 10.00 7.00 -1.000 HFFO 2 331.80 286.80 0.400 10.00 7.00 -1.000 HFFO IS

#### Waters Xevo TQ MS Detector Tune Parameters - MassLynx 4.1 SCN 843

Page 1 of 2

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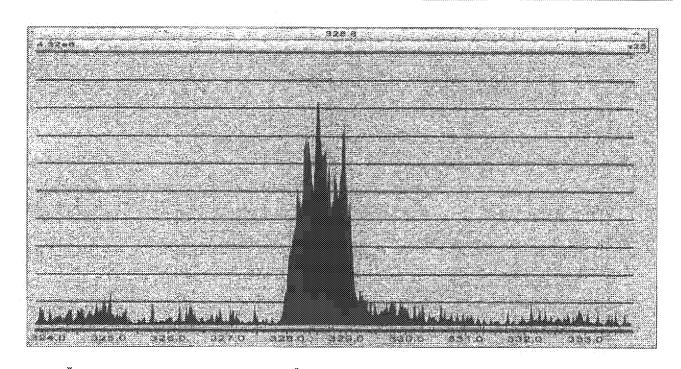
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instrument:

XEVO-TQM8#V8A463

Printed:

Tuesday, February 13, 2018 07:29:51 Mountain Standard Time



NS1 Scan	Start Mass 323.80	<b>End Mass</b> 333.80	Set Mass
Source (ES-) Capillary (kV) Cone (V) Extractor (V) Source Temperature (°C) Descivation Temperature (°C) Cone Ges Flow (L/Hr) Descivation Ges Flow (L/Hr) Colision Ges Flow (mL/Min)	Settings 0.50 10.00 3.00 120 200 50 800 0.16	Readbacks 0.53 -21.08 -10.81 120 200 51 792 0.04	
Analyser LM 1 Resolution HM 1 Resolution Ion Energy 1 MS Mode Collision Energy MSMS Mode Collision Energy MS Mode Entrance MS Mode Entrance MS Mode Exit Gas On MS Mode Entrance Gas On MSMS Mode Entrance Gas On MSMS Mode Entrance Gas Off MS Mode Entrance Gas Off MS Mode Entrance Gas Off MS Mode Entrance Gas Off MSMS Mode Entrance GcanWave MS Mode Exit ScanWave MSMS Mode Exit LM 2 Resolution IfM 2 Resolution Ion Energy 2	8-ttings 2.8 14.8 0.7 7.00 20.00 0.50 0.50 0.50 0.50 30.00 2.00 2.00 0.50 0.50 0.50 0.50 0.50	Readbacks	

Waters Xevo TQ MS Detector Tune Parameters - MaseLynx 4.1 SCN 643

Page 2 of 2

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Instrument

XEVO-TQMS#VBA453

Printed:

Tuesday, February 13, 2018 07:29:51 Mountain Standard Time

Multiplier

523.81

Active Reservoir

Preseure Gauges Collision Cell Preseure (mbar)

7.8302010-005

Instrument Configuration

**Automatic Mode** 

0.005

MS Inter-scan delay (secs) 0.00 Polarity/Mode switch Inter-scan delay (secs)

0.020 0.020

Enhanced Inter-scen delay (secs)

Inter-channel deley - See Tables MS 1 Delay Table: R delay

<= 0.600 0.005

0.008 <**2.000** 

<= 4.000

0.010 <= 11.000 0.012

> 11.000 0.014

MS 2 Delay Table:

R delay

0.008 <= 8.000°

<= 25.000 0.005

> 25.000 0.007

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#### Waters Xevo TQ M8 Detector Tune Persmeters - MassLynx 4.1 SCN 843

Page 1 of 2

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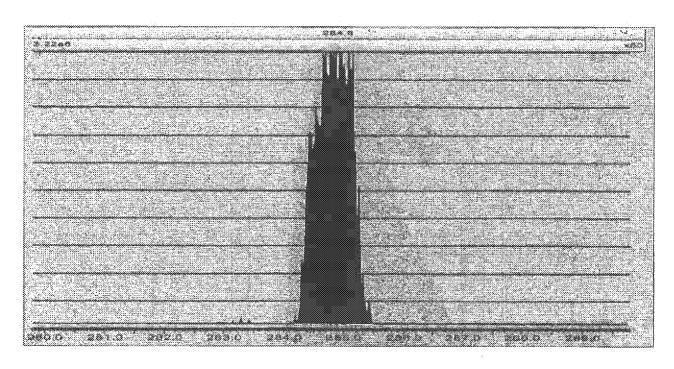
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Instrument

XEVO-TQM9#VBA463

Printed:

Tuesday, February 13, 2018 07:31:02 Mountain Standard Time



Туре Daughter Scan	<b>Start Mass</b> 279.80	End Mass 289.80	<b>Set Mass</b> 328.80
Source (ES-) Capillary (kV) Cone (V) Extractor (V) Source Temperature (°C) Desolvation Temperature (°C) Cone Gas Flow (L/Hr) Desolvation Gas Flow (L/Hr) Collision Gas Flow (mL/Min)	Settings 0.50 10.00 3.00 120 200 60 800 0.15	Readbacks 0.52 -21.06 -10.61 120 200 80 798 0.14	
Analyser LM 1 Resolution HM 1 Resolution Ion Energy 1 MS Mode Collision Energy MSMS Mode Collision Energy MS Mode Entrance MS Mode Entrance MS Mode Exit Gas On MS Mode Entrance Gas On MSMS Mode Entrance Gas On MSMS Mode Entrance Gas Off MS Mode Entrance Gas Off MS Mode Entrance Gas Off MS Mode Entrance Gas Off MSMS Mode Entrance Gas Off MSMS Mode Entrance Gas Off MSMS Mode Exit ScanWave MS Mode Entrance ScanWave MS Mode Entrance ScanWave MS Mode Entrance ScanWave MSMS Mode Exit LM 2 Resolution HM 2 Resolution Ion Energy 2	Settings 2.8 14.8 0.7 7.00 20.00 0.50 0.50 0.50 0.50 0.50 0.50	Readbacks	,

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Waters Xevo TQ M8 Detector Tune Parameters - MassLynx 4.1 SCN 843

Page 2 of 2

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instrument

XEVO-TQMS#VBA453

Printed:

Tueeday, February 13, 2018 07:31:02 Mountain Standard Time

Multiplier

523.81

Active Reservoir

Pressure Gauges Collision Cell Pressure (mbar)

1.2686720-003

Instrument Configuration

**Automatic Mode** 

MS inter-ecan delay (secs)

0.005

Polarity/Mode switch inter-soan delay (secs)

0.020 0.020

Enhanced Inter-scan delay (seca) Inter-channel delay - See Tables

MS 1 Delay Table:

R delay <= 0.500 0.005

**2.000** 0.008

**4.000** 0.010

11.000 0.012

> 11.000 0.014

M8 2 Delay Table:

R delay <= 8.000 0.005

<= 25.000 0.005 > 25.000 0.007

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#### M8 Method Report - MassLynx 4.1 SCN 843

Page 1 of 1

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Printed:

Tuesday, February 13, 2018 07:31:28 Mountain Standard Time

Creation Time Instrument Identifier Fri 18 Nov 2016 09:08:40 XEVO-TQMS#VBA463

Version Number Duration (min)

1.0 2.0

Calbration Flianame

C:\MassLynx\intelliStart\Results\Unit Mass Resolution\Calibration\_20100811

2.cai Solvent Delay Divert Valve Enabled

Number Of Functions

1

#### Function 1: MRM of 2 mass pairs, Time 0.00 to 2.00, ES-

MRM Ion Mode ES. Inter Channel Delay (sec) -1.000 InterScan Time (eec) -1.000 Span (Da) 0.6 Start Time (min) 0.0

End Time (min)

Ch Prnt(De) Dau(De) Dwell(e) Cone(V) Coll(eV) Delay(e) Compound

Ch Prnt(De) Dau(De) Dwell(e) Cone(V) Coll(eV) Delay(e) Compound 1 328.80 284.80 0.400 10.00 7.00 -1.000 BFEO 2 331.80 286.80 0.400 10.00 7.00 -1.000 HFFC IS

#### Waters Xevo TQ M8 Detector Tune Parameters - MassLynx 4.1 SCN 843

Page 1 of 2

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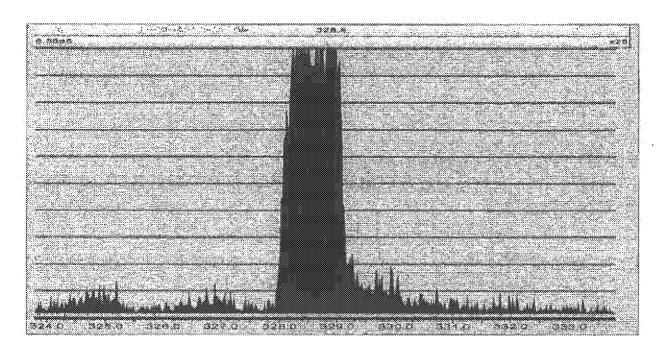
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Instrument:

XEVO-TOMBAVBA463

Printed:

Wednesday, February 14, 2018 07:31:47 Mountain Standard Time



Type MS1 Scan	<b>Start Mess</b> 323.80	End <b>Mass</b> 333.80	Set Mass
Source (ES-) Caplillary (kV) Cone (V) Extractor (V): Source Temperature (°C) Desolvation Temperature (°C) Cone Gas Flow (L/Hr) Desolvation Gas Flow (L/Hr) Collision Gas Flow (mL/Min)	Settings 0.50 10.00 3.00 120 200 50 800 0.15	Readbacks 0.54 -21.08 -10.61 120 200 50 791 0.04	
Analyser LM 1 Resolution HM 1 Resolution Ion Energy 1 MS Mode Collision Energy MSMS Mode Collision Energy MS Mode Entrance MS Mode Exit Ges On MS Mode Entrance Gas On MSMS Mode Exit Gas On MSMS Mode Entrance Gas Off MSMS Mode Entrance Gas Off MS Mode Entrance Gas Off MS Mode Entrance Gas Off MS Mode Entrance Gas Off MSMS Mode Exit Gas Off MSMS Mode Exit ScanWave MS Mode Exit ScanWave MS Mode Exit ScanWave MSMS Mode Entrance ScanWave MSMS Mode Entrance ScanWave MSMS Mode Entrance	Settings 2.8 14.8 0.7 7.00 20.00 0.50 0.50 0.50 0.50 0.60 30.00 2.00 2.00 2.00 0.60 0.60 0.60 0.60	Readbacks	
LM 2 Resolution HM 2 Resolution Ion Energy 2	2.9 14.7 0.3		

Audina Milaha Waters Xevo TQ M8 Detector Tune Parameters - MassLynx 4.1 SCN 843

Page 2 of 2

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Instrument

XEVO-TQM8#VBA463

Printed:

Wednesday, February 14, 2018 07:31:47 Mountain Standard Time

Multiplier

824.05

Active Reservoir

A

Pressure Gauges Collision Cell Pressure (mbar)

7.8302019-005

Instrument Configuration

**Automatic Mode** 

MS Inter-scan delay (secs)

0.006

Polarity/Mode switch Inter-scan delay (secs) Enhanced Inter-scan delay (secs) Inter-channel delay - See Tables

0.020 0.020

MS 1 Delay Table: R delay ← 0.500 0.005 ← 2.000 0.008

**4.000 0.010** 

11.000 0.012

> 11.000 0.014

MS 2 Delay Table: R delay

> 25.000 0.007

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#### Waters Xavo TQ MS Detector Tune Parameters - MassLynx 4.1 SCN 843

Page 1 of 2

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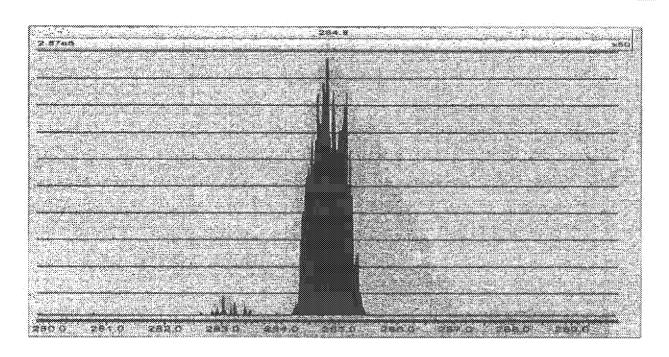
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Instrument:

XEVO-TQM9#VBA463

Printed:

Wednesday, February 14, 2018 07:32:29 Mountain Standard Time



Type Daughter Scen	Start Mass 279.80	<b>End Mass</b> 289.80	<b>Set Mass</b> 328.80	
Source (ES-) Capiliary (KV) Cone (V) Extractor (V) Source Temperature (°C) Desolvation Temperature (°C) Cone Gas Flow (L/Hr) Desolvation Gas Flow (L/Hr) Collision Gas Flow (mL/Min)	Settings 0.50 10.00 3.00 120 200 50 800 0.15	Reedbacks 0.63 -21.08 -10.61 120 200 49 795 0.14		
Analyser LM 1 Resolution HM 1 Resolution Ion Energy 1 MS Mode Collision Energy MSMS Mode Collision Energy MSMS Mode Entrance MS Mode Entrance MS Mode Exit Ges On MS Mode Entrance Gas On MSMS Mode Entrance Gas On MSMS Mode Entrance Gas On MSMS Mode Exit Ges Off MS Mode Exit Ges Off MS Mode Exit Ges Off MSMS Mode Exit Ges Off MSMS Mode Exit ScanWave MS Mode Exit ScanWave MSMS Mode Entrance ScanWave MSMS Mode Exit LM 2 Resolution Ion Energy 2	8ettings 2.8 14.8 0.7 7.00 20.00 0.50 0.50 0.50 0.60 0.60 0.60 30.00 2.00 2.00 0.60 0.60 0.60 0.60 0.60	Readbacks		

Waters Xevo TQ MS Detector Tune Parameters - MassLynx 4.1 SCN 943

Pege 2 of 2

File:

C:\MassLynx\8321.PRO\ACQUD8\HFPOMRM.lpr

instrument:

XEVO-TQM9#V8A463

Printed:

Wednesday, February 14, 2018 07:32:29 Mountain Standard Time

**Multiplier** 

623.81

Active Reservoir

A

Pressure Gauges Collision Cell Pressure (mbar)

1.008453e-003

Instrument Configuration

Automatic Mode

MS Inter-scan delay (secs)

0.005

Polarity/Mode switch inter-scan delay (secs) Enhanced inter-scan delay (secs) Inter-channel delay - See Tables

0.020 0.020

MS 1 Delay Table:

R delay

C.500 0.005

**2.000** 0.008

<= 4.000 0.010 <= 11.000 0.012

> 11.000 0.014

MS 2 Delay Table:

R delay

<= 8.000 0.005

<= 25.000 Q.005

> 25.000 0.007

Milita w/w/s

#### M8 Method Report - MassLynx 4.1 SCN 643

Page 1 of 1

File:

c:\masslynx\8321.pro\acqudb\hfpo.exp.

Printed:

Tuesday, February 13, 2018 07:31:28 Mountain Standard Time

Creation Time Instrument Identifier

Fri 18 Nov 2018 09:08:40 XEVO-TQM8#VBA463

Version Number Duration (min)

1,0 2.0

Calibration Filename

C:\MaseLynx\intell|Start\Results\Unit Mass Resolution\Calibration\_20100811

2.cal Solvent Delay Divert Valve Enabled Number Of Functions

#### Function 1: MRM of 2 mass pairs, Time 0.00 to 2.00, ES-

Type	NRM
lon Mode	ES.
Inter Channel Delay (sec)	-1.000
InterScan Time (eeo)	-1.000
Span (Da)	0.5
Start Time (min)	0.0
End Time (min)	2.0

Ch Prot(Da) Dau(Da) Dwell(s) Cone(V) Coll(eV) Delay(s) Compound 1 328.80 288.80 0.400 10.00 7.00 -1.000 MYPO 2 331.80 288.80 0.400 10.00 7.00 -1.000 MYPO IS

### FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: MB 280-404518/1-A Lab File ID: hfpo718B12064.d Matrix: Water Analysis Method: 8321A Date Collected: Date Extracted: 02/09/2018 20:54 Extraction Method: 3535 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 13:42 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404641 Units: ug/L Q CAS NO. COMPOUND NAME RESULT RL<0.010 13252-13-6 HFPO-DA 0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS

Report Date: 12-Feb-2018 14:31:22 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12064.d

Lims ID: MB 280-404518/1-A

Client ID:

Sample Type: MB

Inject. Date: 12-Feb-2018 13:42:13 ALS Bottle#: 36 Worklist Smp#: 31

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: MB280-404518/1-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:29:54

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPO-DA								
331.8 > 286.8	0.961	1.045	-0.084	1.000	549109	7.35	1069	
* 2 13C3 HFPO-DA (IS)								
331.8 > 286.8	0.961	1.045	-0.084		549109	10.0	1069	

Report Date: 12-Feb-2018 14:31:22 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12064.d

Injection Date: 12-Feb-2018 13:42:13 Instrument ID: LC\_LCMS7

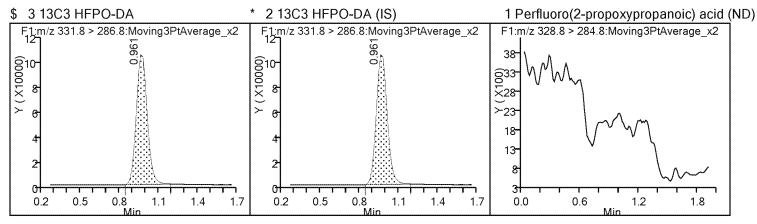
Lims ID: MB 280-404518/1-A

Client ID:

Operator ID: JBH ALS Bottle#: 36 Worklist Smp#: 31

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 12-Feb-2018 14:31:22 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12064.d

Lims ID: MB 280-404518/1-A

Client ID:

Sample Type: MB

Inject. Date: 12-Feb-2018 13:42:13 ALS Bottle#: 36 Worklist Smp#: 31

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: MB280-404518/1-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:29:54

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.35	73.55

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: MB 280-404551/1-A Lab File ID: hfpo718B12082.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 14:41 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: GPC Cleanup: (Y/N) N % Moisture: Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	72		50-200

Report Date: 12-Feb-2018 14:51:40 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12082.d

Lims ID: MB 280-404551/1-A

Client ID:

Sample Type: MB

Inject. Date: 12-Feb-2018 14:41:02 ALS Bottle#: 4 Worklist Smp#: 49

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: MB280-404551/1-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:51:39 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:51:20

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPO-DA								
331.8 > 286.8	0.988	1.045	-0.057	1.000	540825	7.24	1311	
* 2 13C3 HFPO-DA (IS)								
331.8 > 286.8	0.988	1.045	-0.057		540825	10.0	1311	

Report Date: 12-Feb-2018 14:51:40 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12082.d

Injection Date: 12-Feb-2018 14:41:02 Instrument ID: LC\_LCMS7

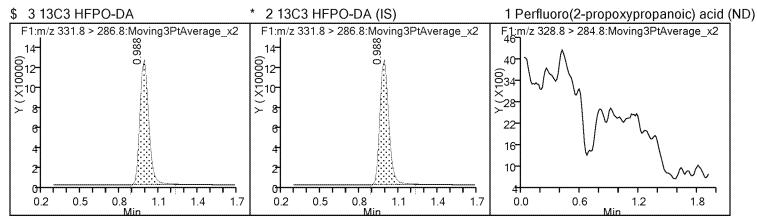
Lims ID: MB 280-404551/1-A

Client ID:

Operator ID: JBH ALS Bottle#: 4 Worklist Smp#: 49

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 12-Feb-2018 14:51:40 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12082.d

Lims ID: MB 280-404551/1-A

Client ID:

Sample Type: MB

Inject. Date: 12-Feb-2018 14:41:02 ALS Bottle#: 4 Worklist Smp#: 49

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: MB280-404551/1-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:51:39 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:51:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.24	72.44

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: MB 280-404556/1-A Lab File ID: hfpo718B12107.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/11/2018 19:22 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 16:02 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404643 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	77		50-200

Report Date: 13-Feb-2018 07:56:34 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12107.d

Lims ID: MB 280-404556/1-A

Client ID:

Sample Type: MB

Inject. Date: 12-Feb-2018 16:02:08 ALS Bottle#: 26 Worklist Smp#: 74

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: MB280-404556/1-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:15

		<u></u>						
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.961	1.045	-0.084	1.000	574035	7.69	1344	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.961	1.045	-0.084		574035	10.0	1344	

Report Date: 13-Feb-2018 07:56:34 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12107.d

Injection Date: 12-Feb-2018 16:02:08 Instrument ID: LC\_LCMS7

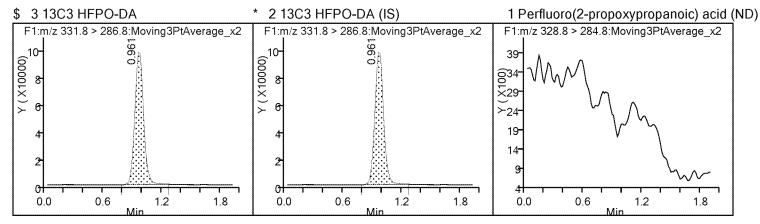
Lims ID: MB 280-404556/1-A

Client ID:

Operator ID: JBH ALS Bottle#: 26 Worklist Smp#: 74

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 13-Feb-2018 07:56:34 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12107.d

Lims ID: MB 280-404556/1-A

Client ID:

Sample Type: MB

Inject. Date: 12-Feb-2018 16:02:08 ALS Bottle#: 26 Worklist Smp#: 74

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: MB280-404556/1-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:15

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.69	76.89

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: MB 280-404557/1-A Lab File ID: hfpo718B12136.d Matrix: Water Analysis Method: 8321A Date Collected: Date Extracted: 02/11/2018 19:44 Extraction Method: 3535 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 17:36 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404644 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	81		50-200

Report Date: 13-Feb-2018 07:56:50 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12136.d

Lims ID: MB 280-404557/1-A

Client ID:

Sample Type: MB

Inject. Date: 12-Feb-2018 17:36:55 ALS Bottle#: 15 Worklist Smp#: 103

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: MB280-404557/1-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:51:58

	Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$	3 13C3 HFPC	)-DA							
3	331.8 > 286.8	0.961	1.045	-0.084	1.000	608119	8.15	1660	
*	2 13C3 HFPO	-DA (IS)							
3	331.8 > 286.8	0.961	1.045	-0.084		608119	10.0	1660	

Report Date: 13-Feb-2018 07:56:50 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12136.d

Injection Date: 12-Feb-2018 17:36:55 Instrument ID: LC\_LCMS7

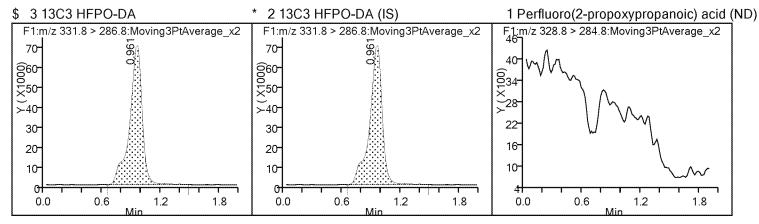
Lims ID: MB 280-404557/1-A

Client ID:

Operator ID: JBH ALS Bottle#: 15 Worklist Smp#: 103

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 13-Feb-2018 07:56:50 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12136.d

Lims ID: MB 280-404557/1-A

Client ID:

Sample Type: MB

Inject. Date: 12-Feb-2018 17:36:55 ALS Bottle#: 15 Worklist Smp#: 103

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: MB280-404557/1-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:51:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.15	81.45

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: MB 280-404582/1-A Lab File ID: hfpo718B13083.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/12/2018 08:23 Sample wt/vol: 250(mL) Date Analyzed: 02/13/2018 12:26 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404879 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	108		50-200

Report Date: 14-Feb-2018 07:00:31 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13083.d

Lims ID: MB 280-404582/1-A

Client ID:

Sample Type: MB

Inject. Date: 13-Feb-2018 12:26:22 ALS Bottle#: 3 Worklist Smp#: 62

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: MB280-404582/1-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera Date: 14-Feb-2018 06:58:20

	Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
(	\$ 3 13C3 HFPC	)-DA							
	331.8 > 286.8	1.002	1.045	-0.043	1.000	806794	10.8	1652	
,	* 2 13C3 HFPO	-DA (IS)							
	331.8 > 286.8	1.002	1.045	-0.043		806794	10.0	1652	

Report Date: 14-Feb-2018 07:00:31 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13083.d

Injection Date: 13-Feb-2018 12:26:22 Instrument ID: LC\_LCMS7

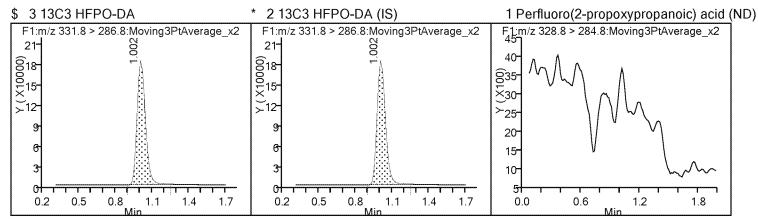
Lims ID: MB 280-404582/1-A

Client ID:

Operator ID: JBH ALS Bottle#: 3 Worklist Smp#: 62

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 14-Feb-2018 07:00:31 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13083.d

Lims ID: MB 280-404582/1-A

Client ID:

Sample Type: MB

Inject. Date: 13-Feb-2018 12:26:22 ALS Bottle#: 3 Worklist Smp#: 62

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: MB280-404582/1-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera Date: 14-Feb-2018 06:58:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.8	108.06

#### FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: MB 280-404785/1-A Lab File ID: hfpo718B14008.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 250(mL) Date Analyzed: 02/14/2018 08:03 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	83		50-200

Report Date: 15-Feb-2018 06:58:46 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14008.d

Lims ID: MB 280-404785/1-A

Client ID:

Sample Type: MB

Inject. Date: 14-Feb-2018 08:03:46 ALS Bottle#: 15 Worklist Smp#: 8

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: MB280-404785/1-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:31

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.961	1.045	-0.084	1.000	619126	8.29	1074	
* 2 13C3 HFPC	DA (IS)							
331.8 > 286.8	0.961	1.045	-0.084		619126	10.0	1074	

Report Date: 15-Feb-2018 06:58:46 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14008.d

Injection Date: 14-Feb-2018 08:03:46 Instrument ID: LC\_LCMS7

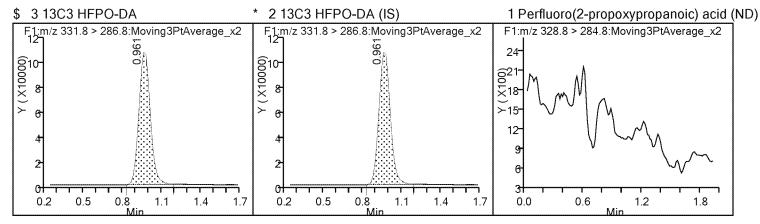
Lims ID: MB 280-404785/1-A

Client ID:

Operator ID: JBH ALS Bottle#: 15 Worklist Smp#: 8

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 15-Feb-2018 06:58:46 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14008.d

Lims ID: MB 280-404785/1-A

Client ID:

Sample Type: MB

Inject. Date: 14-Feb-2018 08:03:46 ALS Bottle#: 15 Worklist Smp#: 8

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: MB280-404785/1-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:31

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.29	82.93

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LCS 280-404518/2-A Lab File ID: hfpo718B12065.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/09/2018 20:54 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 13:45 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404641 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.203		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	74		50-200

Report Date: 12-Feb-2018 14:31:23 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12065.d

Lims ID: LCS 280-404518/2-A

Client ID:

Sample Type: LCS

Inject. Date: 12-Feb-2018 13:45:29 ALS Bottle#: 37 Worklist Smp#: 32

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCS280-404518/2-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:29:56

		,						
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPO	)-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	553166	7.41	1715	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		553166	10.0	1715	
1 Perfluoro(2-p	oropoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	599626	10.2	217	

Report Date: 12-Feb-2018 14:31:23 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12065.d

Injection Date: 12-Feb-2018 13:45:29 Instrument ID: LC\_LCMS7

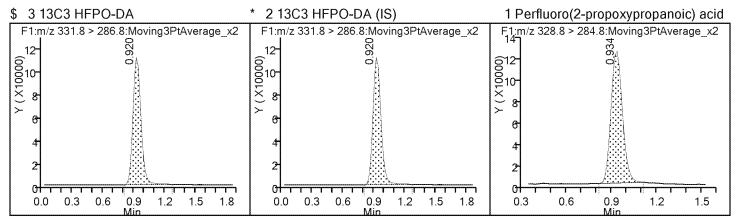
Lims ID: LCS 280-404518/2-A

Client ID:

Operator ID: JBH ALS Bottle#: 37 Worklist Smp#: 32

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 12-Feb-2018 14:31:23 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12065.d

Lims ID: LCS 280-404518/2-A

Client ID:

Sample Type: LCS

Inject. Date: 12-Feb-2018 13:45:29 ALS Bottle#: 37 Worklist Smp#: 32

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCS280-404518/2-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:29:56

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.41	74.09

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LCS 280-404551/2-A Lab File ID: hfpo718B12083.d Matrix: Water Analysis Method: 8321A Date Collected: Date Extracted: 02/11/2018 11:55 Extraction Method: 3535 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 14:44 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.202		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	74		50-200

Report Date: 12-Feb-2018 14:51:40 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12083.d

Lims ID: LCS 280-404551/2-A

Client ID:

Sample Type: LCS

Inject. Date: 12-Feb-2018 14:44:16 ALS Bottle#: 5 Worklist Smp#: 50

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCS280-404551/2-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:51:39 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:51:23

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags		
\$ 3 13C3 HFPC	)-DA									
331.8 > 286.8	0.934	1.045	-0.111	1.000	551138	7.38	1353			
* 2 13C3 HFPO-DA (IS)										
331.8 > 286.8	0.934	1.045	-0.111		551138	10.0	1353			
1 Perfluoro(2-propoxypropanoic) acid										
328.8 > 284.8	0.934	1.056	-0.122	1.000	594369	10.1	192			

Report Date: 12-Feb-2018 14:51:40 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12083.d

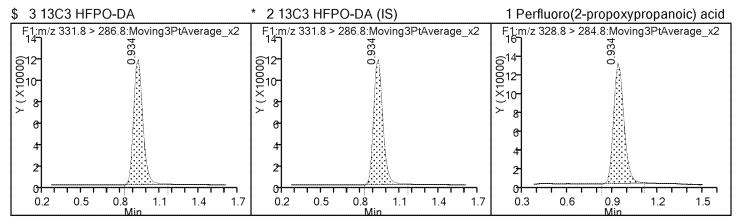
Injection Date: 12-Feb-2018 14:44:16 Instrument ID: LC\_LCMS7

Lims ID: LCS 280-404551/2-A

Client ID:

Operator ID: JBH ALS Bottle#: 5 Worklist Smp#: 50

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 12-Feb-2018 14:51:40 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12083.d

Lims ID: LCS 280-404551/2-A

Client ID:

Sample Type: LCS

Inject. Date: 12-Feb-2018 14:44:16 ALS Bottle#: 5 Worklist Smp#: 50

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCS280-404551/2-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:51:39 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:51:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.38	73.82

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LCS 280-404556/2-A Lab File ID: hfpo718B12108.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/11/2018 19:22 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 16:05 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404643 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.192		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	78		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12108.d

Lims ID: LCS 280-404556/2-A

Client ID:

Sample Type: LCS

Inject. Date: 12-Feb-2018 16:05:24 ALS Bottle#: 27 Worklist Smp#: 75

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCS280-404556/2-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:18

		,								
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags		
\$ 3 13C3 HFPC	D-DA									
331.8 > 286.8	0.920	1.045	-0.125	1.000	581757	7.79	1276			
* 2 13C3 HFPO-DA (IS)										
331.8 > 286.8	0.920	1.045	-0.125		581757	10.0	1276			
1 Perfluoro(2-propoxypropanoic) acid										
328.8 > 284.8	0.934	1.056	-0.122	1.000	595738	9.59	142			

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12108.d

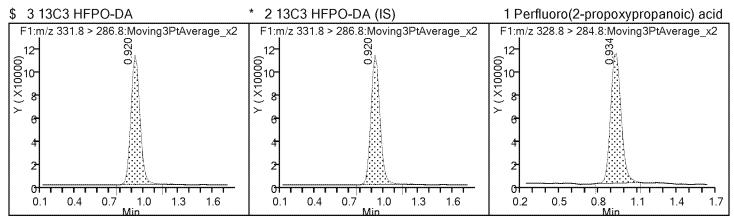
Injection Date: 12-Feb-2018 16:05:24 Instrument ID: LC\_LCMS7

Lims ID: LCS 280-404556/2-A

Client ID:

Operator ID: JBH ALS Bottle#: 27 Worklist Smp#: 75

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12108.d

Lims ID: LCS 280-404556/2-A

Client ID:

Sample Type: LCS

Inject. Date: 12-Feb-2018 16:05:24 ALS Bottle#: 27 Worklist Smp#: 75

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCS280-404556/2-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:18

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.79	77.92

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LCS 280-404557/2-A Lab File ID: hfpo718B12137.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/11/2018 19:44 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 17:40 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404644 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.191		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	78		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \ChromNA\Denver\ChromData\LC LCMS7\20180212-67162.b\hfpo718B12137.d

Lims ID: LCS 280-404557/2-A

Client ID:

Sample Type: LCS

Inject. Date: 12-Feb-2018 17:40:09 ALS Bottle#: 16 Worklist Smp#: 104

Date:

13-Feb-2018 07:52:00

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCS280-404557/2-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera

**EXP** DLT REL Amount S/N Signal RT RT RT RT Response ug/l Flags \$ 3 13C3 HFPO-DA 331.8 > 286.8 0.920 1.045 -0.125 1.000 585476 7.84 1088 \* 2 13C3 HFPO-DA (IS)

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12137.d

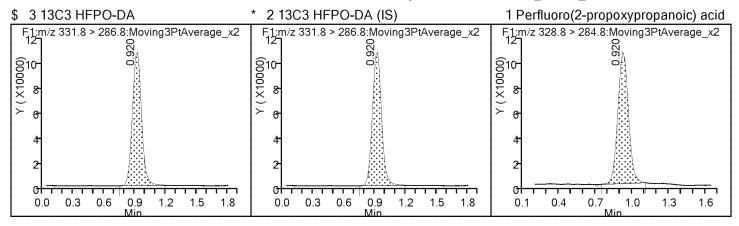
Injection Date: 12-Feb-2018 17:40:09 Instrument ID: LC\_LCMS7

Lims ID: LCS 280-404557/2-A

Client ID:

Operator ID: JBH ALS Bottle#: 16 Worklist Smp#: 104

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12137.d

Lims ID: LCS 280-404557/2-A

Client ID:

Sample Type: LCS

Inject. Date: 12-Feb-2018 17:40:09 ALS Bottle#: 16 Worklist Smp#: 104

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCS280-404557/2-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.84	78.42

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LCS 280-404582/2-A Lab File ID: hfpo718B13084.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/12/2018 08:23 Sample wt/vol: 250(mL) Date Analyzed: 02/13/2018 12:29 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404879 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.157		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	112		50-200

TestAmerica Denver

**Target Compound Quantitation Report** 

Data File: 

Lims ID: LCS 280-404582/2-A

Client ID:

Sample Type: LCS

Inject. Date: 13-Feb-2018 12:29:37 ALS Bottle#: 4 Worklist Smp#: 63

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCS280-404582/2-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

0.947

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: 

Date:

700024

14-Feb-2018 06:58:22

204

7.83

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera

328.8 > 284.8

EVD DIT DEI

Signal	RT	RT	RT	REL	Response	ug/l	S/N	Flags
\$ 3 13C3 HFPC	-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	836720	11.2	1286	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		836720	10.0	1286	
1 Perfluoro(2-p	ropoxyp	ropanoi	c) acid					

1.056 -0.109 1.000

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13084.d

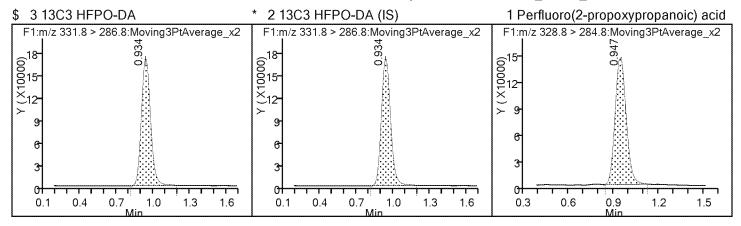
Injection Date: 13-Feb-2018 12:29:37 Instrument ID: LC\_LCMS7

Lims ID: LCS 280-404582/2-A

Client ID:

Operator ID: JBH ALS Bottle#: 4 Worklist Smp#: 63

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13084.d

Lims ID: LCS 280-404582/2-A

Client ID:

Sample Type: LCS

Inject. Date: 13-Feb-2018 12:29:37 ALS Bottle#: 4 Worklist Smp#: 63

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCS280-404582/2-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera Date: 14-Feb-2018 06:58:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.2	112.07

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LCS 280-404785/2-A Lab File ID: hfpo718B14009.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 250(mL) Date Analyzed: 02/14/2018 08:07 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.201		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	79		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14009.d

Lims ID: LCS 280-404785/2-A

Client ID:

Sample Type: LCS

Inject. Date: 14-Feb-2018 08:07:01 ALS Bottle#: 16 Worklist Smp#: 9

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCS280-404785/2-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:33

		,						
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	590182	7.90	1449	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		590182	10.0	1449	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	634139	10.1	386	

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14009.d

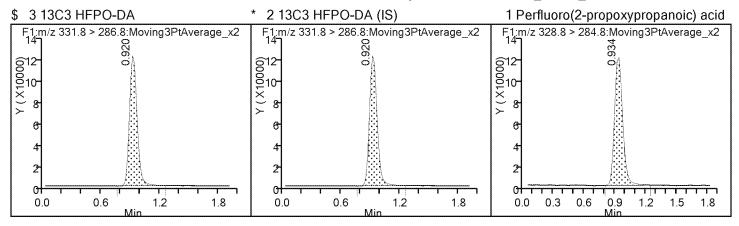
Injection Date: 14-Feb-2018 08:07:01 Instrument ID: LC\_LCMS7

Lims ID: LCS 280-404785/2-A

Client ID:

Operator ID: JBH ALS Bottle#: 16 Worklist Smp#: 9

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14009.d

Lims ID: LCS 280-404785/2-A

Client ID:

Sample Type: LCS

Inject. Date: 14-Feb-2018 08:07:01 ALS Bottle#: 16 Worklist Smp#: 9

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCS280-404785/2-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.90	79.05

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LCSD 280-404518/3-A Lab File ID: hfpo718B12066.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/09/2018 20:54 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 13:48 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404641 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.212		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	71		50-200

Report Date: 12-Feb-2018 14:31:24 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12066.d

Lims ID: LCSD 280-404518/3-A

Client ID:

Sample Type: LCSD

Inject. Date: 12-Feb-2018 13:48:45 ALS Bottle#: 38 Worklist Smp#: 33

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCSD280-404518/3-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:29:58

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	530203	7.10	1602	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		530203	10.0	1602	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	600249	10.6	199	

Report Date: 12-Feb-2018 14:31:24 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12066.d

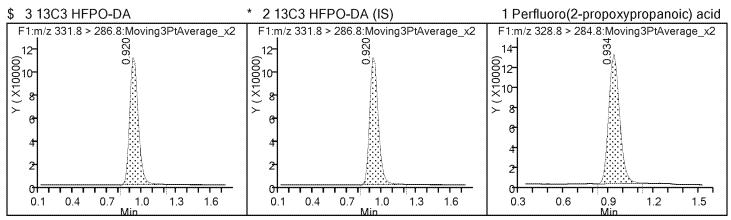
Injection Date: 12-Feb-2018 13:48:45 Instrument ID: LC\_LCMS7

Lims ID: LCSD 280-404518/3-A

Client ID:

Operator ID: JBH ALS Bottle#: 38 Worklist Smp#: 33

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 12-Feb-2018 14:31:24 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12066.d

Lims ID: LCSD 280-404518/3-A

Client ID:

Sample Type: LCSD

Inject. Date: 12-Feb-2018 13:48:45 ALS Bottle#: 38 Worklist Smp#: 33

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCSD280-404518/3-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:29:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.10	71.02

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LCSD 280-404551/4-A Lab File ID: hfpo718B12085.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 14:50 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.192		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	79		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12085.d

Lims ID: LCSD 280-404551/4-A

Client ID:

Sample Type: LCSD

Inject. Date: 12-Feb-2018 14:50:43 ALS Bottle#: 7 Worklist Smp#: 52

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCSD280-404551/4-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:52:59 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:47:19

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	589156	7.89	1945	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		589156	10.0	1945	
1 Perfluoro(2- <sub>l</sub>	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	603835	9.60	166	

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12085.d

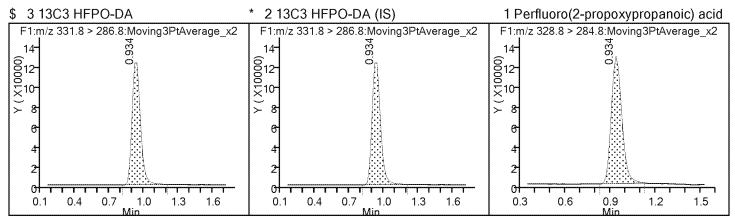
Injection Date: 12-Feb-2018 14:50:43 Instrument ID: LC\_LCMS7

Lims ID: LCSD 280-404551/4-A

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 52

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12085.d

Lims ID: LCSD 280-404551/4-A

Client ID:

Sample Type: LCSD

Inject. Date: 12-Feb-2018 14:50:43 ALS Bottle#: 7 Worklist Smp#: 52

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCSD280-404551/4-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:52:59 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:47:19

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.89	78.91

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LCSD 280-404556/3-A Lab File ID: hfpo718B12109.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/11/2018 19:22 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 16:08 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404643 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.202		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	75		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12109.d

Lims ID: LCSD 280-404556/3-A

Client ID:

Sample Type: LCSD

Inject. Date: 12-Feb-2018 16:08:40 ALS Bottle#: 28 Worklist Smp#: 76

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCSD280-404556/3-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:21

		,		2 51.5					
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPC	D-DA								
331.8 > 286.8	0.920	1.045	-0.125	1.000	557765	7.47	1113		
* 2 13C3 HFPC	D-DA (IS)								
331.8 > 286.8	0.920	1.045	-0.125		557765	10.0	1113		
1 Perfluoro(2-	propoxyp	ropanoi	c) acid						
328.8 > 284.8	0.920	1.056	-0.136	1.000	602476	10.1	167		

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12109.d

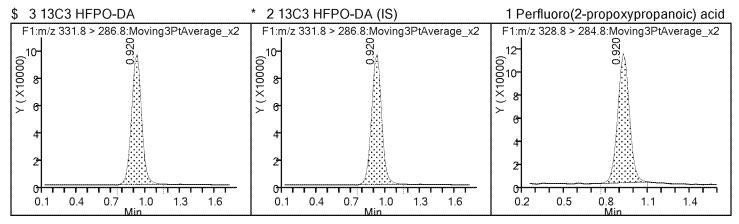
Injection Date: 12-Feb-2018 16:08:40 Instrument ID: LC\_LCMS7

Lims ID: LCSD 280-404556/3-A

Client ID:

Operator ID: JBH ALS Bottle#: 28 Worklist Smp#: 76

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12109.d

Lims ID: LCSD 280-404556/3-A

Client ID:

Sample Type: LCSD

Inject. Date: 12-Feb-2018 16:08:40 ALS Bottle#: 28 Worklist Smp#: 76

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCSD280-404556/3-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:21

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.47	74.71

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LCSD 280-404557/3-A Lab File ID: hfpo718B12138.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/11/2018 19:44 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 17:43 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: GPC Cleanup: (Y/N) N % Moisture: Analysis Batch No.: 404644 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.203		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	78		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12138.d

Lims ID: LCSD 280-404557/3-A

Client ID:

Sample Type: LCSD

Inject. Date: 12-Feb-2018 17:43:24 ALS Bottle#: 17 Worklist Smp#: 105

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCSD280-404557/3-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:03

		,				-		
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.907	1.045	-0.138	1.000	584432	7.83	1020	
* 2 13C3 HFPC	DA (IS)							
331.8 > 286.8	0.907	1.045	-0.138		584432	10.0	1020	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.920	1.056	-0.136	1.000	634506	10.2	140	

TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12138.d

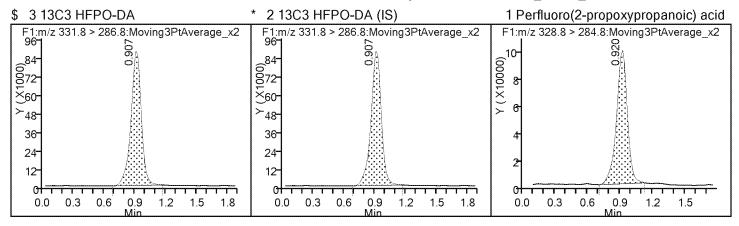
Injection Date: 12-Feb-2018 17:43:24 Instrument ID: LC\_LCMS7

Lims ID: LCSD 280-404557/3-A

Client ID:

Operator ID: JBH ALS Bottle#: 17 Worklist Smp#: 105

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12138.d

Lims ID: LCSD 280-404557/3-A

Client ID:

Sample Type: LCSD

Inject. Date: 12-Feb-2018 17:43:24 ALS Bottle#: 17 Worklist Smp#: 105

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCSD280-404557/3-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.83	78.28

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LCSD 280-404582/3-A Lab File ID: hfpo718B13085.d Matrix: Water Analysis Method: 8321A Date Collected: Date Extracted: 02/12/2018 08:23 Extraction Method: 3535 Sample wt/vol: 250(mL) Date Analyzed: 02/13/2018 12:32 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404879 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.157		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	112		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13085.d

Lims ID: LCSD 280-404582/3-A

Client ID:

Sample Type: LCSD

Inject. Date: 13-Feb-2018 12:32:50 ALS Bottle#: 5 Worklist Smp#: 64

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCSD280-404582/3-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera Date: 14-Feb-2018 06:58:24

		,						
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFP0	D-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	836498	11.2	1402	
* 2 13C3 HFPC	D-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		836498	10.0	1402	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	699516	7.83	169	

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13085.d

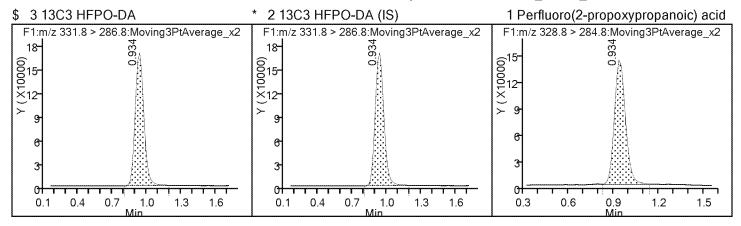
Injection Date: 13-Feb-2018 12:32:50 Instrument ID: LC\_LCMS7

Lims ID: LCSD 280-404582/3-A

Client ID:

Operator ID: JBH ALS Bottle#: 5 Worklist Smp#: 64

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13085.d

Lims ID: LCSD 280-404582/3-A

Client ID:

Sample Type: LCSD

Inject. Date: 13-Feb-2018 12:32:50 ALS Bottle#: 5 Worklist Smp#: 64

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCSD280-404582/3-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera Date: 14-Feb-2018 06:58:24

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.2	112.04

## FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LCSD 280-404785/4-A Lab File ID: hfpo718B14011.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 250(mL) Date Analyzed: 02/14/2018 08:13 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.192		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	82		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14011.d

Lims ID: LCSD 280-404785/4-A

Client ID:

Sample Type: LCSD

Inject. Date: 14-Feb-2018 08:13:30 ALS Bottle#: 18 Worklist Smp#: 11

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCSD280-404785/4-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:37

		,						
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	614305	8.23	1368	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		614305	10.0	1368	
1 Perfluoro(2- <sub>l</sub>	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	628568	9.58	269	

TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14011.d

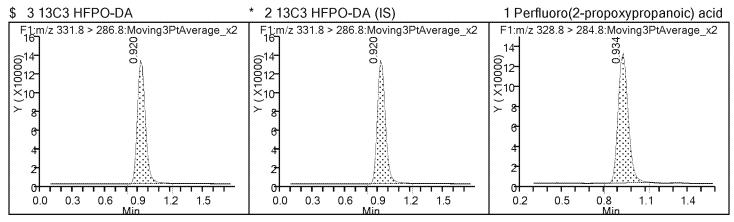
Injection Date: 14-Feb-2018 08:13:30 Instrument ID: LC\_LCMS7

Lims ID: LCSD 280-404785/4-A

Client ID:

Operator ID: JBH ALS Bottle#: 18 Worklist Smp#: 11

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14011.d

Lims ID: LCSD 280-404785/4-A

Client ID:

Sample Type: LCSD

Inject. Date: 14-Feb-2018 08:13:30 ALS Bottle#: 18 Worklist Smp#: 11

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LCSD280-404785/4-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.23	82.28

## FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LLCS 280-404518/4-A Lab File ID: hfpo718B12067.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/09/2018 20:54 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 13:52 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404641 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.0223		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	73		50-200

Report Date: 12-Feb-2018 14:31:25 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12067.d

Lims ID: LLCS 280-404518/4-A

Client ID:

Sample Type: LLCS

Inject. Date: 12-Feb-2018 13:52:01 ALS Bottle#: 39 Worklist Smp#: 34

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LLCS280-404518/4-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Date:

12-Feb-2018 14:30:00

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera

Signal RT RT RT REL Amount S/N Flags

\$ 3 13C3 HFPO-DA 331.8 > 286.8 0.920 1.045 -0.125 1.000 544786 7.30 1476

\* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid

328.8 > 284.8 0.934 1.056 -0.122 1.000 66484 1.11 19.6

Report Date: 12-Feb-2018 14:31:25 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12067.d

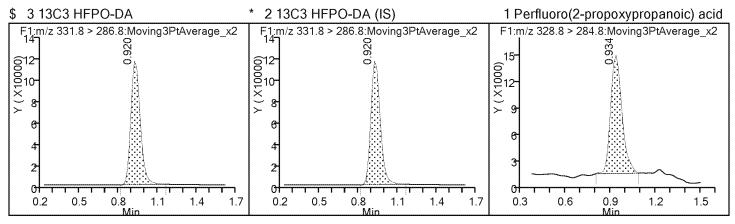
Injection Date: 12-Feb-2018 13:52:01 Instrument ID: LC\_LCMS7

Lims ID: LLCS 280-404518/4-A

Client ID:

Operator ID: JBH ALS Bottle#: 39 Worklist Smp#: 34

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 12-Feb-2018 14:31:25 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12067.d

Lims ID: LLCS 280-404518/4-A

Client ID:

Sample Type: LLCS

Inject. Date: 12-Feb-2018 13:52:01 ALS Bottle#: 39 Worklist Smp#: 34

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LLCS280-404518/4-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:30:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.30	72.97

#### FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LLCS 280-404551/3-A Lab File ID: hfpo718B12084.d Matrix: Water Analysis Method: 8321A Date Collected: Date Extracted: 02/11/2018 11:55 Extraction Method: 3535 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 14:47 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
252-13-6	HFPO-DA	0.0173		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	82		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12084.d

Lims ID: LLCS 280-404551/3-A

Client ID:

Sample Type: LLCS

Inject. Date: 12-Feb-2018 14:47:29 ALS Bottle#: 6 Worklist Smp#: 51

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LLCS280-404551/3-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:52:59 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:47:14

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	611881	8.20	1795	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		611881	10.0	1795	
1 Perfluoro(2- <sub>l</sub>	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.934	1.056	-0.122	1.000	58376	0.8629	17.4	

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12084.d

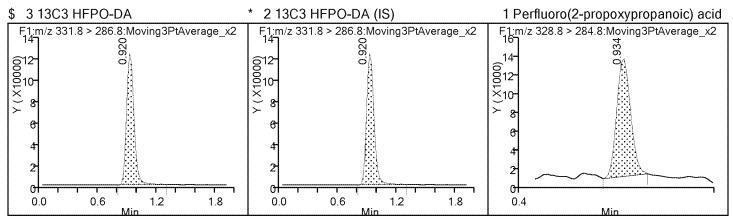
Injection Date: 12-Feb-2018 14:47:29 Instrument ID: LC\_LCMS7

Lims ID: LLCS 280-404551/3-A

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 51

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12084.d

Lims ID: LLCS 280-404551/3-A

Client ID:

Sample Type: LLCS

Inject. Date: 12-Feb-2018 14:47:29 ALS Bottle#: 6 Worklist Smp#: 51

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LLCS280-404551/3-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:52:59 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:47:14

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.20	81.96

## FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LLCS 280-404556/4-A Lab File ID: hfpo718B12110.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/11/2018 19:22 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 16:11 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: GPC Cleanup:(Y/N) N % Moisture: Analysis Batch No.: 404643 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.0186		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	76		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12110.d

Lims ID: LLCS 280-404556/4-A

Client ID:

Sample Type: LLCS

Inject. Date: 12-Feb-2018 16:11:56 ALS Bottle#: 29 Worklist Smp#: 77

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LLCS280-404556/4-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:25

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	569882	7.63	849	
* 2 13C3 HFPC	DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		569882	10.0	849	
1 Perfluoro(2-propoxypropanoic) acid								М
328.8 > 284.8	0.920	1.056	-0.136	1.000	58379	0.9290	12.3	M

#### QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12110.d

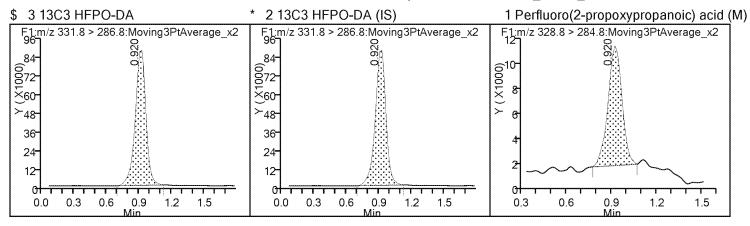
Injection Date: 12-Feb-2018 16:11:56 Instrument ID: LC\_LCMS7

Lims ID: LLCS 280-404556/4-A

Client ID:

Operator ID: JBH ALS Bottle#: 29 Worklist Smp#: 77

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12110.d

Lims ID: LLCS 280-404556/4-A

Client ID:

Sample Type: LLCS

Inject. Date: 12-Feb-2018 16:11:56 ALS Bottle#: 29 Worklist Smp#: 77

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LLCS280-404556/4-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:33 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:49:25

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.63	76.33

Report Date: 13-Feb-2018 07:56:36 Chrom Revision: 2.2 08-Feb-2018 13:38:42 Manual Integration/User Assign Peak Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12110.d

Injection Date: 12-Feb-2018 16:11:56 Instrument ID: LC\_LCMS7

Lims ID: LLCS 280-404556/4-A

Client ID:

Operator ID: ALS Bottle#: 29 77 JBH Worklist Smp#:

Injection Vol: 20.0 ul 1.0000 Dil. Factor:

Method: **HFPO** Limit Group: LC - 8321A\_HFPO\_Du

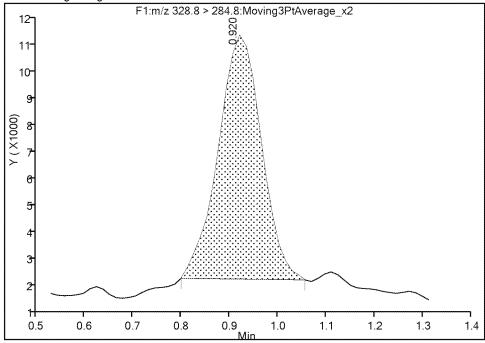
Column: Detector F1:MRM

#### 1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

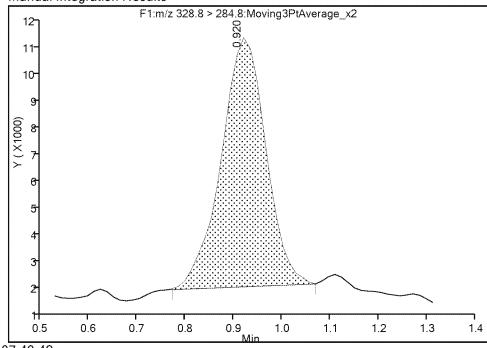
RT: 0.92 Area: 55296 Amount: 0.878151 Amount Units: ug/l

Processing Integration Results



RT: 0.92 Area: 58379 Amount: 0.929005 Amount Units: ug/l

Manual Integration Results 12



Reviewer: meyera, 13-Feb-2018 07:49:42

Audit Action: Manually Integrated

Audit Reason: Baseline

Page 596 of 711

## FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LLCS 280-404557/4-A Lab File ID: hfpo718B12139.d Matrix: Water Analysis Method: 8321A Date Collected: Date Extracted: 02/11/2018 19:44 Extraction Method: 3535 Sample wt/vol: 250(mL) Date Analyzed: 02/12/2018 17:46 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404644 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.0190		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	84		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12139.d

Lims ID: LLCS 280-404557/4-A

Client ID:

Sample Type: LLCS

Inject. Date: 12-Feb-2018 17:46:39 ALS Bottle#: 18 Worklist Smp#: 106

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LLCS280-404557/4-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

0.920

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

1.056 -0.136

Process Host: XAWRK025

328.8 > 284.8

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:05 **EXP** DLT REL Amount Signal RT RT RT RT Response ug/l S/N Flags \$ 3 13C3 HFPO-DA 331.8 > 286.8 0.920 1.045 -0.125 1.000 626405 8.39 991 \* 2 13C3 HFPO-DA (IS) 331.8 > 286.8 0.920 1.045 -0.125 626405 10.0 991 1 Perfluoro(2-propoxypropanoic) acid

65585

0.9503

13.0

1.000

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12139.d

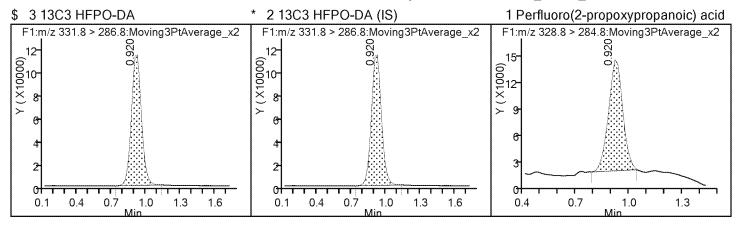
Injection Date: 12-Feb-2018 17:46:39 Instrument ID: LC\_LCMS7

Lims ID: LLCS 280-404557/4-A

Client ID:

Operator ID: JBH ALS Bottle#: 18 Worklist Smp#: 106

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12139.d

Lims ID: LLCS 280-404557/4-A

Client ID:

Sample Type: LLCS

Inject. Date: 12-Feb-2018 17:46:39 ALS Bottle#: 18 Worklist Smp#: 106

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LLCS280-404557/4-A

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:49 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:52:05

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.39	83.90

## FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LLCS 280-404582/4-A Lab File ID: hfpo718B13086.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/12/2018 08:23 Sample wt/vol: 250(mL) Date Analyzed: 02/13/2018 12:36 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404879 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.0167		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	119		50-200

TestAmerica Denver

**Target Compound Quantitation Report** 

Data File: \\ChromNA\Denver\ChromData\LC LCMS7\20180213-67200.b\hfpo718B13086.d

Lims ID: LLCS 280-404582/4-A

Client ID:

Sample Type: **LLCS** 

Inject. Date: 13-Feb-2018 12:36:04 ALS Bottle#: 6 Worklist Smp#: 65

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LLCS280-404582/4-A

Misc. Info.: HFPO18B13

Operator ID: **JBH** Instrument ID: LC LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: 

Date:

890104

10.0

1617

14-Feb-2018 06:58:26

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera

331.8 > 286.8

**EXP** DLT REL Amount Signal RT RT RT RT Response ug/l S/N Flags \$ 3 13C3 HFPO-DA 1.000 890104 11.9 1617

331.8 > 286.8 0.947 1.045 -0.098

\* 2 13C3 HFPO-DA (IS)

1.045 -0.098

0.947 1 Perfluoro(2-propoxypropanoic) acid

1.056 -0.109 328.8 > 284.8 0.947 1.000 82266 0.8348 21.6

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13086.d

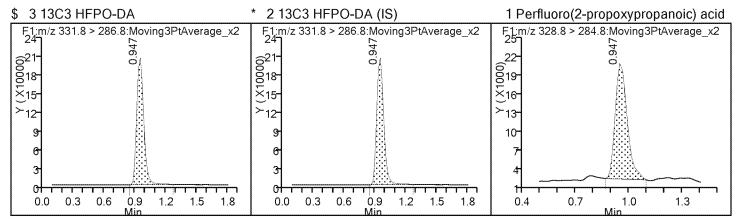
Injection Date: 13-Feb-2018 12:36:04 Instrument ID: LC\_LCMS7

Lims ID: LLCS 280-404582/4-A

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 65

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\hfpo718B13086.d

Lims ID: LLCS 280-404582/4-A

Client ID:

Sample Type: LLCS

Inject. Date: 13-Feb-2018 12:36:04 ALS Bottle#: 6 Worklist Smp#: 65

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LLCS280-404582/4-A

Misc. Info.: HFPO18B13

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180213-67200.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 14-Feb-2018 07:00:30 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK006

First Level Reviewer: meyera Date: 14-Feb-2018 06:58:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.9	119.22

## FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: Lab Sample ID: LLCS 280-404785/3-A Lab File ID: hfpo718B14010.d Matrix: Water Analysis Method: 8321A Date Collected: Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 250(mL) Date Analyzed: 02/14/2018 08:10 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: GPC Cleanup: (Y/N) N % Moisture: Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.0178		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	84		50-200

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14010.d

Lims ID: LLCS 280-404785/3-A

Client ID:

Sample Type: LLCS

Inject. Date: 14-Feb-2018 08:10:15 ALS Bottle#: 17 Worklist Smp#: 10

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LLCS280-404785/3-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:35

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags		
\$ 3 13C3 HFPO-DA										
331.8 > 286.8	0.934	1.045	-0.111	1.000	626027	8.39	1159			
* 2 13C3 HFPO-DA (IS)										
331.8 > 286.8	0.934	1.045	-0.111		626027	10.0	1159			
1 Perfluoro(2-propoxypropanoic) acid										
328.8 > 284.8	0.947	1.056	-0.109	1.000	61421	0.8883	32.2			

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14010.d

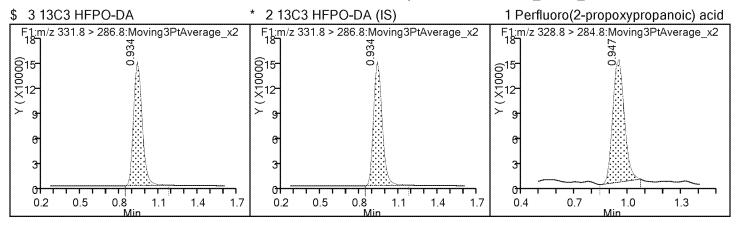
Injection Date: 14-Feb-2018 08:10:15 Instrument ID: LC\_LCMS7

Lims ID: LLCS 280-404785/3-A

Client ID:

Operator ID: JBH ALS Bottle#: 17 Worklist Smp#: 10

Injection Vol: 20.0 ul Dil. Factor: 1.0000



TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14010.d

Lims ID: LLCS 280-404785/3-A

Client ID:

Sample Type: LLCS

Inject. Date: 14-Feb-2018 08:10:15 ALS Bottle#: 17 Worklist Smp#: 10

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: LLCS280-404785/3-A

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:45 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:51:35

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.39	83.85

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Te	stAmerica Denver	Job	Job No.: 280-106036-1						
SDG No.:									
Client Sampl	e ID:	Lak	Lab Sample ID: DLCK 280-404345/13						
Matrix: Wate	er	Lak	Lab File ID: hfpo718B08044.d						
Analysis Met	hod: 8321A	Dat	Date Collected:						
Extraction M	Method:	Dat	Date Extracted:						
Sample wt/vo	ol: 1(mL)	Dat	Date Analyzed: 02/08/2018 13:38						
Con. Extract	Vol.:	Dil	Dilution Factor: 1						
Injection Vo	olume: 20(uL)	GC	GC Column: Synergi Hydro ID:						
% Moisture:		GPC	GPC Cleanup: (Y/N) N						
Analysis Bat	ch No.: 404345	Uni	Units: ug/L						
CAS NO.	COMPOUND NAME		RESULT	Q		RL			
13252-13-6	HFPO-DA		<0.50			0.50			
CAS NO.	SURROGATE			%REC	C	Q	LIMITS		
STL02255	13C3 HFPO-DA			1	.04		50-200		

Report Date: 08-Feb-2018 15:24:19 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08044.d

Lims ID: DLCK

Client ID:

Sample Type: DLCK

Inject. Date: 08-Feb-2018 13:38:01 ALS Bottle#: 2 Worklist Smp#: 13

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: DLCK

Misc. Info.: HFPO18B08

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 08-Feb-2018 15:24:17 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:32

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPO-DA									
331.8 > 286.8	1.056	1.045	0.011	1.000	776147	10.4	1241		
* 2 13C3 HFPO-DA (IS)									
331.8 > 286.8	1.056	1.045	0.011		776147	10.0	1241		
1 Perfluoro(2-propoxypropanoic) acid M								M	
328.8 > 284.8	1.056	1.056	0.0	1.000	21424	0.2255	2.8	M	

#### QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HFPO\_CAL-1\_00032 Amount Added: 1.00 Units: mL

Report Date: 08-Feb-2018 15:24:19 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08044.d

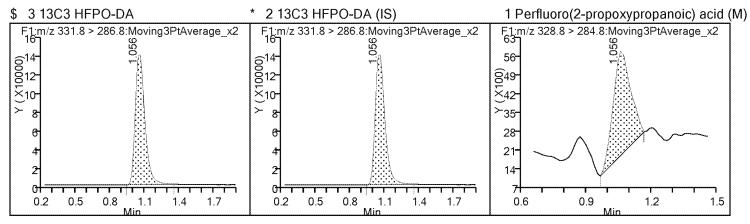
Injection Date: 08-Feb-2018 13:38:01 Instrument ID: LC\_LCMS7

Lims ID: DLCK

Client ID:

Operator ID: JBH ALS Bottle#: 2 Worklist Smp#: 13

Injection Vol: 20.0 ul Dil. Factor: 1.0000



Report Date: 08-Feb-2018 15:24:19 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Recovery Report

Lims ID: DLCK

Client ID:

Sample Type: DLCK

Inject. Date: 08-Feb-2018 13:38:01 ALS Bottle#: 2 Worklist Smp#: 13

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: DLCK

Misc. Info.: HFPO18B08

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 08-Feb-2018 15:24:17 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:32

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.4	103.96

Report Date: 08-Feb-2018 15:24:19 Chrom Revision: 2.2 24-Jan-2018 15:37:30 Manual Integration/User Assign Peak Report

#### TestAmerica Denver

Data File:

Injection Date: 08-Feb-2018 13:38:01 Instrument ID: LC LCMS7

Lims ID: **DLCK** 

Client ID:

Operator ID: ALS Bottle#: 2 13 JBH Worklist Smp#:

Injection Vol: 20.0 ul 1.0000 Dil. Factor:

Method: **HFPO** Limit Group: LC - 8321A\_HFPO\_Du

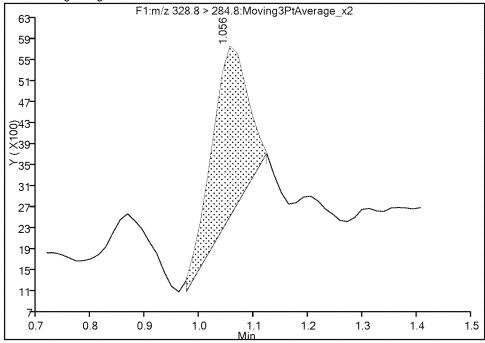
Column: Detector F1:MRM

### 1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

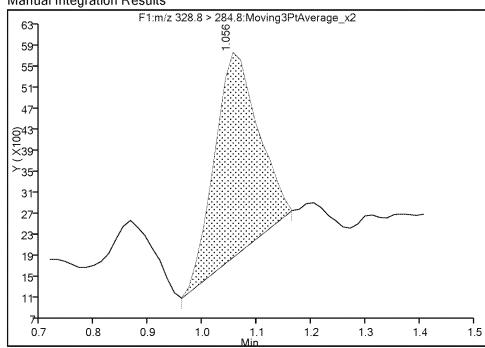
RT: 1.06 Area: 14614 0.143034 Amount: Amount Units: ug/l

Processing Integration Results



RT: 1.06 Area: 21424 Amount: 0.225513 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 08-Feb-2018 15:20:27

Audit Action: Manually Integrated

Audit Reason: Baseline

Page 613 of 711

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6476TABOR-W1-1-0201 Lab Sample ID: 280-106036-2 MS 18 MS Lab File ID: hfpo718B12071.d Matrix: Water Date Collected: 02/01/2018 09:22 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/09/2018 20:54 Sample wt/vol: 284.8(mL) Date Analyzed: 02/12/2018 14:05 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404641 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.237		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	63		50-200

Report Date: 12-Feb-2018 14:31:28 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12071.d

Lims ID: 280-106036-K-2-A MS

Client ID: FAY-D-6476TABOR-W1-1-020118

Sample Type: MS

Inject. Date: 12-Feb-2018 14:05:07 ALS Bottle#: 43 Worklist Smp#: 38

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-K-2-AMS

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:30:19

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	472009	6.32	814	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		472009	10.0	814	
1 Perfluoro(2- <sub>l</sub>	oropoxyp	ropanoi	c) acid					
328.8 > 284.8	0.920	1.056	-0.136	1.000	680795	13.5	109	

Report Date: 12-Feb-2018 14:31:28 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12071.d

Injection Date: 12-Feb-2018 14:05:07 Instrument ID: LC\_LCMS7

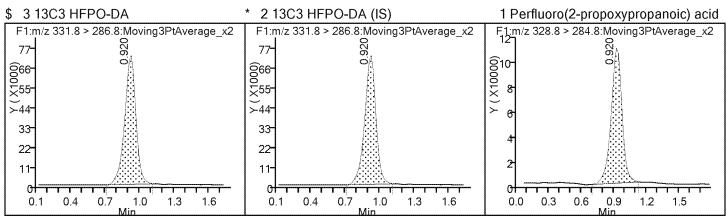
Lims ID: 280-106036-K-2-A MS

Client ID: FAY-D-6476TABOR-W1-1-020118

Operator ID: JBH ALS Bottle#: 43 Worklist Smp#: 38

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 12-Feb-2018 14:31:28 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12071.d

Lims ID: 280-106036-K-2-A MS

Client ID: FAY-D-6476TABOR-W1-1-020118

Sample Type: MS

Inject. Date: 12-Feb-2018 14:05:07 ALS Bottle#: 43 Worklist Smp#: 38

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-K-2-AMS

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:30:19

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	6.32	63.22

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-5049MATTH-W1-1-0201 Lab Sample ID: 280-106036-11 MS 18 MS Lab File ID: hfpo718B12097.d Matrix: Water Date Collected: 02/01/2018 13:48 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 276.4(mL) Date Analyzed: 02/12/2018 15:29 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

	CAS NO.	COMPOUND NAME	RESULT	Q	RL	
f	13252-13-6	HFPO-DA	0.280		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	76		50-200

Report Date: 13-Feb-2018 07:56:28 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12097.d

Lims ID: 280-106036-C-11-A MS

Client ID: FAY-D-5049MATTH-W1-1-020118

Sample Type: MS

Inject. Date: 12-Feb-2018 15:29:37 ALS Bottle#: 18 Worklist Smp#: 64

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-11-AMS

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:48:07

		,				-			
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags	
\$ 3 13C3 HFPC	)-DA								
331.8 > 286.8	0.934	1.045	-0.111	1.000	568791	7.62	1199		
* 2 13C3 HFPO	-DA (IS)								
331.8 > 286.8	0.934	1.045	-0.111		568791	10.0	1199		
1 Perfluoro(2-	oropoxyp	ropanoi	c) acid						
328.8 > 284.8	0.947	1.056	-0.109	1.000	937565	15.5	177		

Report Date: 13-Feb-2018 07:56:28 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12097.d

Injection Date: 12-Feb-2018 15:29:37 Instrument ID: LC\_LCMS7

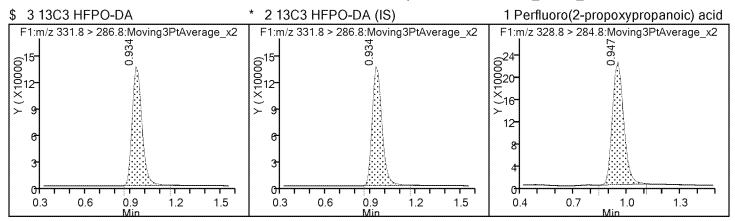
Lims ID: 280-106036-C-11-A MS

Client ID: FAY-D-5049MATTH-W1-1-020118

Operator ID: JBH ALS Bottle#: 18 Worklist Smp#: 64

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 13-Feb-2018 07:56:28 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12097.d

Lims ID: 280-106036-C-11-A MS

Client ID: FAY-D-5049MATTH-W1-1-020118

Sample Type: MS

Inject. Date: 12-Feb-2018 15:29:37 ALS Bottle#: 18 Worklist Smp#: 64

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-11-AMS

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:48:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.62	76.18

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-3322DANDE-W1-1-0201 Lab Sample ID: 280-106036-38 MS 18 MS Lab File ID: hfpo718B14026.d Matrix: Water Date Collected: 02/01/2018 16:30 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 300.2(mL) Date Analyzed: 02/14/2018 09:02 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.157		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	83		50-200

Report Date: 15-Feb-2018 06:58:55 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14026.d

Lims ID: 280-106036-C-38-A MS

Client ID: FAY-D-3322DANDE-W1-1-020118

Sample Type: MS

Inject. Date: 14-Feb-2018 09:02:35 ALS Bottle#: 32 Worklist Smp#: 26

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-38-AMS

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:55:50

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	619923	8.30	1286	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		619923	10.0	1286	
1 Perfluoro(2- <sub>l</sub>	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.947	1.056	-0.109	1.000	625847	9.46	155	

Report Date: 15-Feb-2018 06:58:55 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14026.d

Injection Date: 14-Feb-2018 09:02:35 Instrument ID: LC\_LCMS7

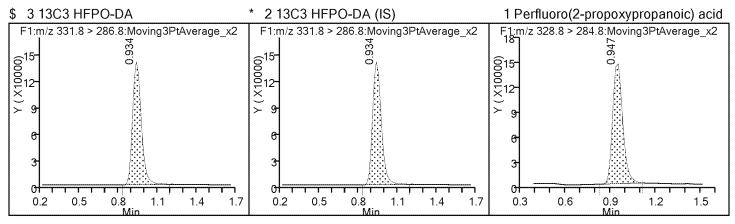
Lims ID: 280-106036-C-38-A MS

Client ID: FAY-D-3322DANDE-W1-1-020118

Operator ID: JBH ALS Bottle#: 32 Worklist Smp#: 26

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 15-Feb-2018 06:58:55 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14026.d

Lims ID: 280-106036-C-38-A MS

Client ID: FAY-D-3322DANDE-W1-1-020118

Sample Type: MS

Inject. Date: 14-Feb-2018 09:02:35 ALS Bottle#: 32 Worklist Smp#: 26

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-C-38-AMS

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:55:50

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.30	83.03

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-6476TABOR-W1-1-0201 Lab Sample ID: 280-106036-2 DU 18 DU Lab File ID: hfpo718B12070.d Matrix: Water Date Collected: 02/01/2018 09:22 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/09/2018 20:54 Sample wt/vol: 270.4(mL) Date Analyzed: 02/12/2018 14:01 Con. Extract Vol.: 5(mL) Dilution Factor: 1 Injection Volume: 20(uL) GC Column: Synergi Hydro ID: % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404641 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.0395		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	66		50-200

Report Date: 12-Feb-2018 14:31:27 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12070.d

Lims ID: 280-106036-F-2-A DU

Client ID: FAY-D-6476TABOR-W1-1-020118

Sample Type: DU

Inject. Date: 12-Feb-2018 14:01:51 ALS Bottle#: 42 Worklist Smp#: 37

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-F-2-ADU

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:30:17

		,				-		
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	489094	6.55	1138	
* 2 13C3 HFPC	DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		489094	10.0	1138	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.920	1.056	-0.136	1.000	112856	2.14	22.8	

Report Date: 12-Feb-2018 14:31:27 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12070.d

Injection Date: 12-Feb-2018 14:01:51 Instrument ID: LC\_LCMS7

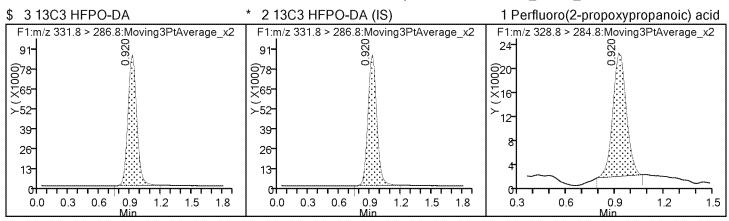
Lims ID: 280-106036-F-2-A DU

Client ID: FAY-D-6476TABOR-W1-1-020118

Operator ID: JBH ALS Bottle#: 42 Worklist Smp#: 37

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 12-Feb-2018 14:31:27 Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12070.d

Lims ID: 280-106036-F-2-A DU

Client ID: FAY-D-6476TABOR-W1-1-020118

Sample Type: DU

Inject. Date: 12-Feb-2018 14:01:51 ALS Bottle#: 42 Worklist Smp#: 37

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-F-2-ADU

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 12-Feb-2018 14:31:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK021

First Level Reviewer: meyera Date: 12-Feb-2018 14:30:17

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	6.55	65.51

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-5049MATTH-W1-1-0201 Lab Sample ID: 280-106036-11 DU 18 DU Lab File ID: hfpo718B12096.d Matrix: Water Date Collected: 02/01/2018 13:48 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/11/2018 11:55 Sample wt/vol: 283.1(mL) Date Analyzed: 02/12/2018 15:26 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 404642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.111		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	73		50-200

Report Date: 13-Feb-2018 07:56:27 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12096.d

Lims ID: 280-106036-B-11-A DU

Client ID: FAY-D-5049MATTH-W1-1-020118

Sample Type: DU

Inject. Date: 12-Feb-2018 15:26:22 ALS Bottle#: 17 Worklist Smp#: 63

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-11-ADU

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:48:04

		,				-		
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.934	1.045	-0.111	1.000	542537	7.27	1668	
* 2 13C3 HFPO	-DA (IS)							
331.8 > 286.8	0.934	1.045	-0.111		542537	10.0	1668	
1 Perfluoro(2-	propoxyp	ropanoi	c) acid					
328.8 > 284.8	0.947	1.056	-0.109	1.000	365204	6.29	77.6	

Report Date: 13-Feb-2018 07:56:27 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12096.d

Injection Date: 12-Feb-2018 15:26:22 Instrument ID: LC\_LCMS7

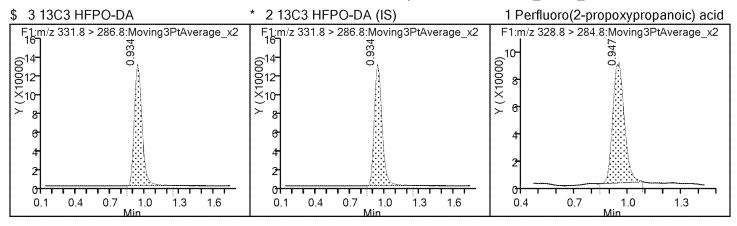
Lims ID: 280-106036-B-11-A DU

Client ID: FAY-D-5049MATTH-W1-1-020118

Operator ID: JBH ALS Bottle#: 17 Worklist Smp#: 63

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 13-Feb-2018 07:56:27 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\hfpo718B12096.d

Lims ID: 280-106036-B-11-A DU

Client ID: FAY-D-5049MATTH-W1-1-020118

Sample Type: DU

Inject. Date: 12-Feb-2018 15:26:22 ALS Bottle#: 17 Worklist Smp#: 63

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-11-ADU

Misc. Info.: HFPO18B12

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180212-67162.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 13-Feb-2018 07:56:21 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK025

First Level Reviewer: meyera Date: 13-Feb-2018 07:48:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.27	72.67

# FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1 SDG No.: Client Sample ID: FAY-D-3322DANDE-W1-1-0201 Lab Sample ID: 280-106036-38 DU 18 DU Lab File ID: hfpo718B14025.d Matrix: Water Date Collected: 02/01/2018 16:30 Analysis Method: 8321A Extraction Method: 3535 Date Extracted: 02/13/2018 11:30 Sample wt/vol: 303.3(mL) Date Analyzed: 02/14/2018 08:59 Con. Extract Vol.: 5(mL) Dilution Factor: 1 GC Column: Synergi Hydro ID: Injection Volume: 20(uL) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 405022 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	78		50-200

Report Date: 15-Feb-2018 06:58:54 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14025.d

Lims ID: 280-106036-B-38-A DU

Client ID: FAY-D-3322DANDE-W1-1-020118

Sample Type: DU

Inject. Date: 14-Feb-2018 08:59:18 ALS Bottle#: 31 Worklist Smp#: 25

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-38-ADU

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:55:48

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
\$ 3 13C3 HFPC	)-DA							
331.8 > 286.8	0.920	1.045	-0.125	1.000	580584	7.78	1147	
* 2 13C3 HFPC	DA (IS)							
331.8 > 286.8	0.920	1.045	-0.125		580584	10.0	1147	

Report Date: 15-Feb-2018 06:58:54 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14025.d

Injection Date: 14-Feb-2018 08:59:18 Instrument ID: LC\_LCMS7

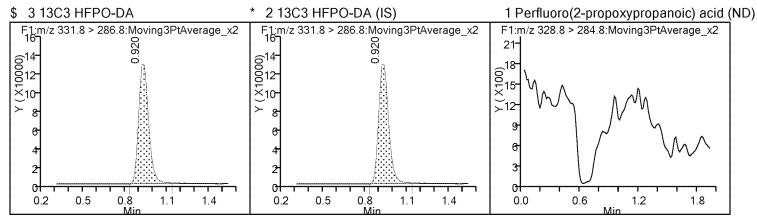
Lims ID: 280-106036-B-38-A DU

Client ID: FAY-D-3322DANDE-W1-1-020118

Operator ID: JBH ALS Bottle#: 31 Worklist Smp#: 25

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A\_HFPO\_Du



Report Date: 15-Feb-2018 06:58:54 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\hfpo718B14025.d

Lims ID: 280-106036-B-38-A DU

Client ID: FAY-D-3322DANDE-W1-1-020118

Sample Type: DU

Inject. Date: 14-Feb-2018 08:59:18 ALS Bottle#: 31 Worklist Smp#: 25

Injection Vol: 20.0 ul Dil. Factor: 1.0000

Sample Info: 280-106036-B-38-ADU

Misc. Info.: HFPO18B14

Operator ID: JBH Instrument ID: LC\_LCMS7

Method: \ChromNA\Denver\ChromData\LC\_LCMS7\20180215-67263.b\HFPO.m

Limit Group: LC - 8321A\_HFPO\_Du

Last Update: 15-Feb-2018 06:58:50 Calib Date: 08-Feb-2018 13:31:32

Integrator: Picker

Quant Method: Internal/External Standard Quant By: Initial Calibration

Last ICal File: \\ChromNA\Denver\ChromData\LC\_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1: Det: F1:MRM

Process Host: XAWRK001

First Level Reviewer: meyera Date: 15-Feb-2018 06:55:48

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	7.78	77.76

Lab Name: TestAmerica Denver	Job No.: 280-106036-1				
SDG No.:					
Instrument ID: LC_LCMS7	Start Date: 10/10/2017 09:35				
Analysis Batch Number: 390728	End Date: 10/10/2017 11:19				

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD001 280-390728/3		10/10/2017 09:35	1	hfpo717J10026.d	Synergi Hydro
STD002 280-390728/4		10/10/2017 09:38	1	hfpo717J10027.d	Synergi Hydro
STD003 280-390728/5		10/10/2017 09:41	1	hfpo717J10028.d	Synergi Hydro
STD004 280-390728/6		10/10/2017 09:45	1	hfpo717J10029.d	Synergi Hydro
STD005 280-390728/7		10/10/2017 09:48	1	hfpo717J10030.d	Synergi Hydro
STD006 280-390728/8		10/10/2017 09:51	1	hfpo717J10031.d	Synergi Hydro
STD007 280-390728/9		10/10/2017 09:54	1	hfpo717J10032.d	Synergi Hydro
STD008 280-390728/10 IC		10/10/2017 09:58	1	hfpo717J10033.d	Synergi Hydro
ICB 280-390728/11		10/10/2017 10:01	1		Synergi Hydro
ZZZZZ		10/10/2017 10:04	1		Synergi Hydro
ICV 280-390728/13		10/10/2017 10:07	1	hfpo717J10036.d	Synergi Hydro
ZZZZZ		10/10/2017 10:11	1		Synergi Hydro
ZZZZZ		10/10/2017 10:14	1		Synergi Hydro
ZZZZZ		10/10/2017 10:17	1		Synergi Hydro
ZZZZZ		10/10/2017 10:20	1		Synergi Hydro
ZZZZZ		10/10/2017 10:23	1		Synergi Hydro
ZZZZZ		10/10/2017 10:27	1		Synergi Hydro
ZZZZZ		10/10/2017 10:30	1		Synergi Hydro
ZZZZZ		10/10/2017 10:33	1		Synergi Hydro
ZZZZZ		10/10/2017 10:36	1		Synergi Hydro
ZZZZZ		10/10/2017 10:40	1		Synergi Hydro
CCV 280-390728/24		10/10/2017 10:43	1		Synergi Hydro
ZZZZZ		10/10/2017 10:46	1		Synergi Hydro
ZZZZZ		10/10/2017 10:49	1		Synergi Hydro
ZZZZZ		10/10/2017 10:53	1		Synergi Hydro
ZZZZZ		10/10/2017 10:56	1		Synergi Hydro
ZZZZZ		10/10/2017 10:59	1		Synergi Hydro
ZZZZZ		10/10/2017 11:02	1		Synergi Hydro
ZZZZZ		10/10/2017 11:06	1		Synergi Hydro
ZZZZZ		10/10/2017 11:09	1		Synergi Hydro
ZZZZZ		10/10/2017 11:12	1		Synergi Hydro
ZZZZZ		10/10/2017 11:16	1		Synergi Hydro
CCV 280-390728/35		10/10/2017 11:19	1		Synergi Hydro

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
SDG No.:	
Instrument ID: LC_LCMS7	Start Date: 02/08/2018 13:05
Analysis Batch Number: 404345	End Date: 02/08/2018 13:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD001 280-404345/3		02/08/2018 13:05	1	hfpo718B08034.d	Synergi Hydro
STD002 280-404345/4		02/08/2018 13:08	1.	hfpo718B08035.d	Synergi Hydro
STD003 280-404345/5 IC		02/08/2018 13:12	1	hfpo718B08036.d	Synergi Hydro
STD004 280-404345/6 IC		02/08/2018 13:15	1	hfpo718B08037.d	Synergi Hydro
STD005 280-404345/7 IC		02/08/2018 13:18	1	hfpo718B08038.d	Synergi Hydro
STD006 280-404345/8 IC		02/08/2018 13:21	1	hfpo718B08039.d	Synergi Hydro
STD007 280-404345/9 IC		02/08/2018 13:25	1	hfpo718B08040.d	Synergi Hydro
STD008 280-404345/10 IC		02/08/2018 13:28	1	hfpo718B08041.d	Synergi Hydro
STD009 280-404345/11 IC		02/08/2018 13:31	1	hfpo718B08042.d	Synergi Hydro
ICB 280-404345/12		02/08/2018 13:34	1		Synergi Hydro
DLCK 280-404345/13		02/08/2018 13:38	1	hfpo718B08044.d	Synergi Hydro
ICV 280-404345/14		02/08/2018 13:41	1		Synergi Hydro

Lab Name: TestAmerica Denver	Job No.: <u>280-106036-1</u>
SDG No.:	
Instrument ID: LC_LCMS7	Start Date: 02/12/2018 13:38
Analysis Batch Number: 404641	End Date: 02/12/2018 14:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-404641/30		02/12/2018 13:38	1	hfpo718B12063.d	Synergi Hydro
MB 280-404518/1-A		02/12/2018 13:42	1	hfpo718B12064.d	Synergi Hydro
LCS 280-404518/2-A		02/12/2018 13:45	1	hfpo718B12065.d	Synergi Hydro
LCSD 280-404518/3-A		02/12/2018 13:48	1	hfpo718B12066.d	Synergi Hydro
LLCS 280-404518/4-A		02/12/2018 13:52	1	hfpo718B12067.d	Synergi Hydro
280-106036-1		02/12/2018 13:55	1	hfpo718B12068.d	Synergi Hydro
280-106036-2		02/12/2018 13:58	1	hfpo718B12069.d	Synergi Hydro
280-106036-2 DU		02/12/2018 14:01	1	hfpo718B12070.d	Synergi Hydro
280-106036-2 MS		02/12/2018 14:05	1	hfpo718B12071.d	Synergi Hydro
ZZZZZ		02/12/2018 14:08	1		Synergi Hydro
ZZZZZ		02/12/2018 14:11	1		Synergi Hydro
CCV 280-404641/41		02/12/2018 14:14	1	hfpo718B12074.d	Synergi Hydro
ZZZZZ		02/12/2018 14:18	1		Synergi Hydro
ZZZZZ		02/12/2018 14:21	1		Synergi Hydro
ZZZZZ		02/12/2018 14:24	1		Synergi Hydro
ZZZZZ		02/12/2018 14:28	1		Synergi Hydro
ZZZZZ		02/12/2018 14:31	1		Synergi Hydro
ZZZZZ		02/12/2018 14:34	1		Synergi Hydro
CCV 280-404641/48		02/12/2018 14:37	1		Synergi Hydro

Lab Name: TestAmerica Denver	Job No.: 280-106036-1	
SDG No.:		
Instrument ID: LC_LCMS7	Start Date: 02/12/2018 14:37	
Analysis Batch Number: 404642	End Date: 02/12/2018 15:58	

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-404642/48		02/12/2018 14:37	1	hfpo718B12081.d	Synergi Hydro
MB 280-404551/1-A		02/12/2018 14:41	1	hfpo718B12082.d	Synergi Hydro
LCS 280-404551/2-A		02/12/2018 14:44	1	hfpo718B12083.d	Synergi Hydro
LLCS 280-404551/3-A		02/12/2018 14:47	1	hfpo718B12084.d	Synergi Hydro
LCSD 280-404551/4-A		02/12/2018 14:50	1	hfpo718B12085.d	Synergi Hydro
280-106036-3		02/12/2018 14:53	1	hfpo718B12086.d	Synergi Hydro
280-106036-4		02/12/2018 14:57	1	hfpo718B12087.d	Synergi Hydro
CCV 280-404642/55		02/12/2018 15:00	1	hfpo718B12088.d	Synergi Hydro
280-106036-5		02/12/2018 15:03	1	hfpo718B12089.d	Synergi Hydro
280-106036-6		02/12/2018 15:06	1	hfpo718B12090.d	Synergi Hydro
280-106036-7		02/12/2018 15:10	1	hfpo718B12091.d	Synergi Hydro
280-106036-8		02/12/2018 15:13	1	hfpo718B12092.d	Synergi Hydro
280-106036-9		02/12/2018 15:16	1	hfpo718B12093.d	Synergi Hydro
280-106036-10		02/12/2018 15:19	1	hfpo718B12094.d	Synergi Hydro
280-106036-11		02/12/2018 15:23	1	hfpo718B12095.d	Synergi Hydro
280-106036-11 DU		02/12/2018 15:26	1	hfpo718B12096.d	Synergi Hydro
280-106036-11 MS		02/12/2018 15:29	1	hfpo718B12097.d	Synergi Hydro
280-106036-12		02/12/2018 15:32	1	hfpo718B12098.d	Synergi Hydro
CCV 280-404642/66		02/12/2018 15:36	1	hfpo718B12099.d	Synergi Hydro
280-106036-13		02/12/2018 15:39	1	hfpo718B12100.d	Synergi Hydro
280-106036-14		02/12/2018 15:42	1	hfpo718B12101.d	Synergi Hydro
280-106036-15		02/12/2018 15:45	1	hfpo718B12102.d	Synergi Hydro
280-106036-16		02/12/2018 15:49	1	hfpo718B12103.d	Synergi Hydro
280-106036-17		02/12/2018 15:52	1	hfpo718B12104.d	Synergi Hydro
280-106036-18		02/12/2018 15:55	1	hfpo718B12105.d	Synergi Hydro
CCV 280-404642/73		02/12/2018 15:58	1	hfpo718B12106.d	Synergi Hydro

Lab Name: TestAmerica Denver	Job No.: 280-106036-1		
SDG No.:			
Instrument ID: LC_LCMS7	Start Date: 02/12/2018 15:58		
Analysis Batch Number: 404643	End Date: 02/12/2018 17:33		

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-404643/73		02/12/2018 15:58	1	hfpo718B12106.d	Synergi Hydro
MB 280-404556/1-A		02/12/2018 16:02	1	hfpo718B12107.d	Synergi Hydro
LCS 280-404556/2-A		02/12/2018 16:05	1	hfpo718B12108.d	Synergi Hydro
LCSD 280-404556/3-A		02/12/2018 16:08	1	hfpo718B12109.d	Synergi Hydro
LLCS 280-404556/4-A		02/12/2018 16:11	1	hfpo718B12110.d	Synergi Hydro
280-106036-19		02/12/2018 16:15	1	hfpo718B12111.d	Synergi Hydro
280-106036-20		02/12/2018 16:18	1	hfpo718B12112.d	Synergi Hydro
280-106036-21		02/12/2018 16:21	1	hfpo718B12113.d	Synergi Hydro
280-106036-22		02/12/2018 16:25	1	hfpo718B12114.d	Synergi Hydro
ZZZZZ		02/12/2018 16:28	1		Synergi Hydro
ZZZZZ		02/12/2018 16:31	1		Synergi Hydro
CCV 280-404643/84		02/12/2018 16:34	1	hfpo718B12117.d	Synergi Hydro
ZZZZZ		02/12/2018 16:38	1		Synergi Hydro
ZZZZZ		02/12/2018 16:41	1		Synergi Hydro
ZZZZZ		02/12/2018 16:44	1		Synergi Hydro
ZZZZZ		02/12/2018 16:47	1		Synergi Hydro
ZZZZZ		02/12/2018 16:51	1		Synergi Hydro
ZZZZZ		02/12/2018 16:54	1		Synergi Hydro
ZZZZZ		02/12/2018 16:57	1		Synergi Hydro
ZZZZZ		02/12/2018 17:01	1		Synergi Hydro
ZZZZZ		02/12/2018 17:04	1		Synergi Hydro
CCV 280-404643/94		02/12/2018 17:07	1	hfpo718B12127.d	Synergi Hydro
ZZZZZ		02/12/2018 17:10	1		Synergi Hydro
ZZZZZ		02/12/2018 17:14	1		Synergi Hydro
ZZZZZ		02/12/2018 17:17	1		Synergi Hydro
ZZZZZ		02/12/2018 17:20	1		Synergi Hydro
ZZZZZ		02/12/2018 17:23	1		Synergi Hydro
ZZZZZ		02/12/2018 17:27	1		Synergi Hydro
ZZZZZ		02/12/2018 17:30	1		Synergi Hydro
CCV 280-404643/102		02/12/2018 17:33	1		Synergi Hydro

Lab Name: TestAmerica Denver	Job No.: 280-106036-1				
SDG No.:					
Instrument ID: LC_LCMS7	Start Date: 02/12/2018 17:33				
Analysis Batch Number: 404644	End Date: 02/12/2018 18:25				

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-404644/102		02/12/2018 17:33	1	hfpo718B12135.d	Synergi Hydro
MB 280-404557/1-A		02/12/2018 17:36	1	hfpo718B12136.d	Synergi Hydro
LCS 280-404557/2-A		02/12/2018 17:40	1	hfpo718B12137.d	Synergi Hydro
LCSD 280-404557/3-A		02/12/2018 17:43	1	hfpo718B12138.d	Synergi Hydro
LLCS 280-404557/4-A		02/12/2018 17:46	1	hfpo718B12139.d	Synergi Hydro
280-106036-23		02/12/2018 17:49	1	hfpo718B12140.d	Synergi Hydro
280-106036-24		02/12/2018 17:53	1	hfpo718B12141.d	Synergi Hydro
280-106036-25		02/12/2018 17:56	1	hfpo718B12142.d	Synergi Hydro
280-106036-26		02/12/2018 17:59	1	hfpo718B12143.d	Synergi Hydro
CCV 280-404644/111		02/12/2018 18:02	1	hfpo718B12144.d	Synergi Hydro
ZZZZZ		02/12/2018 18:06	1		Synergi Hydro
ZZZZZ		02/12/2018 18:09	1		Synergi Hydro
ZZZZZ		02/12/2018 18:12	1		Synergi Hydro
ZZZZZ		02/12/2018 18:15	1		Synergi Hydro
ZZZZZ		02/12/2018 18:19	1		Synergi Hydro
ZZZZZ		02/12/2018 18:22	1		Synergi Hydro
CCV 280-404644/118		02/12/2018 18:25	1	hfpo718B12151.d	Synergi Hydro

Lab Name: TestAmerica Denver	Job No.: 280-106036-1
SDG No.:	
Instrument ID: LC_LCMS7	Start Date: 02/13/2018 12:23
Analysis Batch Number: 404879	End Date: 02/13/2018 15:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID	
CCV 280-404879/61		02/13/2018 12:23	1	hfpo718B13082.d	Synergi Hydro	
MB 280-404582/1-A		02/13/2018 12:26	1	hfpo718B13083.d	Synergi Hydro	
LCS 280-404582/2-A		02/13/2018 12:29	1	hfpo718B13084.d	Synergi Hydro	
LCSD 280-404582/3-A		02/13/2018 12:32	1	hfpo718B13085.d	Synergi Hydro	
LLCS 280-404582/4-A		02/13/2018 12:36	1	hfpo718B13086.d	Synergi Hydro	
280-106036-39		02/13/2018 12:39	1	hfpo718B13087.d	Synergi Hydro	
280-106036-40		02/13/2018 12:42	1	hfpo718B13088.d	Synergi Hydro	
280-106036-41		02/13/2018 12:45	1	hfpo718B13089.d	Synergi Hydro	
280-106036-42		02/13/2018 12:49	1	hfpo718B13090.d	Synergi Hydro	
280-106036-43		02/13/2018 12:52	1	hfpo718B13091.d	Synergi Hydro	
CCV 280-404879/71		02/13/2018 12:55	1	hfpo718B13092.d	Synergi Hydro	
CCV 280-404879/72		02/13/2018 14:06	1	hfpo718B13111.d	Synergi Hydro	
ZZZZZ		02/13/2018 14:09	50		Synergi Hydro	
ZZZZZ		02/13/2018 14:13	50		Synergi Hydro	
ZZZZZ		02/13/2018 14:16	50		Synergi Hydro	
ZZZZZ		02/13/2018 14:19	1		Synergi Hydro	
ZZZZZ		02/13/2018 14:22	1		Synergi Hydro	
ZZZZZ		02/13/2018 14:26	1		Synergi Hydro	
ZZZZZ		02/13/2018 14:29	1		Synergi Hydro	
CCV 280-404879/80		02/13/2018 14:32	1	hfpo718B13119.d	Synergi Hydro	
ZZZZZ		02/13/2018 14:36	50		Synergi Hydro	
ZZZZZ		02/13/2018 14:39	50		Synergi Hydro	
ZZZZZ		02/13/2018 14:42	50		Synergi Hydro	
ZZZZZ		02/13/2018 14:45	1		Synergi Hydro	
ZZZZZ		02/13/2018 14:49	2		Synergi Hydro	
ZZZZZ		02/13/2018 14:52	1		Synergi Hydro	
ZZZZZ		02/13/2018 14:55	1		Synergi Hydro	
ZZZZZ		02/13/2018 14:58	2		Synergi Hydro	
ZZZZZ		02/13/2018 15:02	2		Synergi Hydro	
ZZZZZ		02/13/2018 15:05	2		Synergi Hydro	
CCV 280-404879/91		02/13/2018 15:08	1	hfpo718B13130.d	Synergi Hydro	

Lab Name: Te	stAmerica Denver	Job No.: 280-106036-1
SDG No.:		
Instrument I	D: LC_LCMS7	Start Date: 02/14/2018 08:00
Analysis Bat	ch Number: 405022	End Date: 02/14/2018 09:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID	
CCV 280-405022/7		02/14/2018 08:00	1	hfpo718B14007.d	Synergi Hydro	
MB 280-404785/1-A		02/14/2018 08:03	1	hfpo718B14008.d	Synergi Hydro	
LCS 280-404785/2-A		02/14/2018 08:07	1	hfpo718B14009.d	Synergi Hydro	
LLCS 280-404785/3-A		02/14/2018 08:10	1	hfpo718B14010.d	Synergi Hydro	
LCSD 280-404785/4-A		02/14/2018 08:13	1	hfpo718B14011.d	Synergi Hydro	
280-106036-27		02/14/2018 08:16	1	hfpo718B14012.d	Synergi Hydro	
280-106036-28		02/14/2018 08:20	1	hfpo718B14013.d	Synergi Hydro	
280-106036-29		02/14/2018 08:23	1	hfpo718B14014.d	Synergi Hydro	
280-106036-30		02/14/2018 08:26	1	hfpo718B14015.d	Synergi Hydro	
280-106036-31		02/14/2018 08:30	1	hfpo718B14016.d	Synergi Hydro	
280-106036-32		02/14/2018 08:33	1	hfpo718B14017.d	Synergi Hydro	
CCV 280-405022/18		02/14/2018 08:36	1	hfpo718B14018.d	Synergi Hydro	
280-106036-33		02/14/2018 08:39	1	hfpo718B14019.d	Synergi Hydro	
280-106036-34		02/14/2018 08:43	1	hfpo718B14020.d	Synergi Hydro	
280-106036-35		02/14/2018 08:46	1	hfpo718B14021.d	Synergi Hydro	
280-106036-36		02/14/2018 08:49	1	hfpo718B14022.d	Synergi Hydro	
280-106036-37		02/14/2018 08:52	1	hfpo718B14023.d	Synergi Hydro	
280-106036-38		02/14/2018 08:56	1	hfpo718B14024.d	Synergi Hydro	
280-106036-38 DU		02/14/2018 08:59	1	hfpo718B14025.d	Synergi Hydro	
280-106036-38 MS		02/14/2018 09:02	1	hfpo718B14026.d	Synergi Hydro	
ZZZZZ		02/14/2018 09:05	2		Synergi Hydro	
CCV 280-405022/28		02/14/2018 09:09	1	hfpo718B14028.d	Synergi Hydro	

#### LCMS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Batch Number: 404518 Batch Start Date: 02/09/18 20:54 Batch Analyst: Cokley, Cheyana D

Batch Method: 3535 Batch End Date: 02/09/18 23:23

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	HFPO I.S. 00008	HFPO Spike 00004
MB 280-404518/1		3535, 8321A				250 mL	5 mL	0.1 mL	
LCS 280-404518/2		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-404518/3		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LLCS 280-404518/4		3535, 8321A				250 mL	5 mL	0.1 mL	0.01 mL
280-106036-C-1	FAY-D-6377TABOR- W1-1-020118	3535, 8321A	T	308.3 g	28.8 g	279.5 mL	5 mL	0.1 mL	
280-106036-E-2	FAY-D-6476TABOR- W1-1-020118	3535, 8321A	T	302.8 g	28.8 g	274 mL	5 mL	0.1 mL	
280-106036-F-2 DU	FAY-D-6476TABOR- W1-1-020118	3535, 8321A	Т	298.7 g	28.3 g	270.4 mL	5 mL	0.1 mL	
280-106036-K-2 MS	FAY-D-6476TABOR- W1-1-020118	3535, 8321A	T	313.3 g	28.5 g	284.8 mL	5 mL	0.1 mL	0.1 mL

Batch Notes						
Acid ID	2% Formic Aci_00141					
Acid Name	2% Formic Acid					
Balance ID	24350888					
Batch Comment	Reviewer:CDC					
First End time	2.9.18@2139					
H2O ID	HPLC_Water_00851					
Pipette ID	P, SPE-1+ syringe					
Reagent ID	10% NH4OH					
Reagent Lot Number	10% NH4OH_00118					
Solvent Lot #	Methanol_00190					
Solvent Name	Methanol					
SOP Number	DV-OP-0019					
SPE Cartridge Type	STRATA-X-AW (8B S038 FCH)					
Solid Phase Extraction Disk ID	s308-0079					
First Start time	2.9.18@2059					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8321A Page 1 of 2

#### LCMS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Batch Number: 404518 Batch Start Date: 02/09/18 20:54 Batch Analyst: Cokley, Cheyana D

Batch Method: 3535 Batch End Date: 02/09/18 23:23

Basis	Basis Description
Т	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8321A Page 2 of 2

#### LCMS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Batch Number: 404551 Batch Start Date: 02/11/18 11:55 Batch Analyst: Bourgery, David F

Batch Method: 3535 Batch End Date: 02/11/18 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	HFPO I.S. 00008	HFPO Spike 00004
MB 280-404551/1		3535, 8321A				250 mL	5 mL	0.1 mL	
LCS 280-404551/2		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LLCS 280-404551/3		3535, 8321A				250 mL	5 mL	0.1 mL	0.01 mL
LCSD 280-404551/4		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
280-106036-C-3	FAY-D-6476TABOR- W1-1-020118-D	3535, 8321A	Т	305.8 g	29.9 g	275.9 mL	5 mL	0.1 mL	
280-106036-B-4	FAY-D-6644TABOR- W1-1-020118	'	Т	293.7 g	28.8 g	264.9 mL	5 mL	0.1 mL	
280-106036-A-5	FAY-D-6644TABOR- W2-1-020118	3535, 8321A	Т	322.8 g	29.5 g	293.3 mL	5 mL	0.1 mL	
280-106036-D-6	FAY-D-6808TABOR- W1-1-020118	3535, 8321A	T	304.2 g	30.3 g	273.9 mL	5 mL	0.1 mL	
280-106036-A-7	FAY-D-6838TABOR- W1-1-020118	3535, 8321A	Т	302.1 g	30.6 g	271.5 mL	5 mL	0.1 mL	
280-106036-C-8	FAY-D-6838TABOR- W2-1-020118	3535, 8321A	Т	311.0 g	29.8 g	281.2 mL	5 mL	0.1 mL	
280-106036-C-9	FAY-D-6858TABOR- W1-1-020118	3535, 8321A	T	332.2 g	30.8 g	301.4 mL	5 mL	0.1 mL	
280-106036-A-10	FAY-D-7047TABOR- W1-1-020118	3535, 8321A	T	306.5 g	29.6 g	276.9 mL	5 mL	0.1 mL	
280-106036-A-11	FAY-D-5049MATTH- W1-1-020118	'	T	317.9 g	30.2 g	287.7 mL	5 mL	0.1 mL	
DU	FAY-D-5049MATTH- W1-1-020118	,	T	314.3 g	31.2 g	283.1 mL	5 mL	0.1 mL	
MS	FAY-D-5049MATTH- W1-1-020118		T	307.4 g	31.0 g	276.4 mL	5 mL	0.1 mL	0.1 mL
280-106036-A-12	FAY-D-7646TABOR- W1-1-02018	3535, 8321A	T	312.0 g	29.6 g	282.4 mL	5 mL	0.1 mL	
280-106036-C-13	FAY-D-6731BUTLE- W1-1-020118	3535, 8321A	T	322.8 g	28.9 g	293.9 mL	5 mL	0.1 mL	
280-106036-B-14	FAY-D-6731BUTLE- W1-2-020118	3535, 8321A	Т	320.8 g	31.4 g	289.4 mL	5 mL	0.1 mL	
280-106036-A-15	FAY-D-6815BUTLE- W1-1-020118	3535, 8321A	T	302.3 g	30.1 g	272.2 mL	5 mL	0.1 mL	
280-106036-C-16	FAY-D-6893BUTLE- W1-1-020118	3535, 8321A	Т	317.1 g	29.6 g	287.5 mL	5 mL	0.1 mL	
280-106036-B-17	FAY-D-5018MRSHR- W1-1-020118	3535, 8321A	Т	321.4 g	29.2 g	292.2 mL	5 mL	0.1 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8321A Page 1 of 2

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Batch Number: 404551 Batch Start Date: 02/11/18 11:55 Batch Analyst: Bourgery, David F

Batch Method: 3535 Batch End Date: 02/11/18 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	HFPO I.S. 00008	HFPO Spike 00004
280-106036-A-18	FAY-D-5018MRSHR- W1-2-020118	3535, 8321A	Т	323.5 g	30.2 g	293.3 mL	5 mL	0.1 mL	

Batch Notes					
Acid ID	2% Formic Aci_00141/142				
Acid Name	2% Formic Acid				
Balance ID	24350888				
Batch Comment	Reviewer:DB				
First End time	02/11/18 1600				
H2O ID	HPLC_Water_00851				
Pipette ID	M2, SPE-1+ syringe				
Reagent ID	10% NH4OH				
Reagent Lot Number	10% NH4OH_00118				
Solvent Lot #	Methanol_00190				
Solvent Name	Methanol				
SOP Number	DV-OP-0019				
SPE Cartridge Type	STRATA-X-AW (8B S038 FCH)				
Solid Phase Extraction Disk ID	\$308-0079				
First Start time	02/11/18 1205				

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8321A Page 2 of 2

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Batch Number: 404556 Batch Start Date: 02/11/18 19:22 Batch Analyst: Cokley, Cheyana D

Batch Method: 3535 Batch End Date: 02/11/18 21:53

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	HFPO I.S. 00008	HFPO Spike 00004
MB 280-404556/1		3535, 8321A				250 mL	5 mL	0.1 mL	
LCS 280-404556/2		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-404556/3		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LLCS 280-404556/4		3535, 8321A				250 mL	5 mL	0.1 mL	0.01 mL
280-106036-C-19	FAY-D-5021MRSHR- W1-1-020118	3535, 8321A	T	326.1 g	29.5 g	296.6 mL	5 mL	0.1 mL	
280-106036-D-20	FAY-D-5021MRSHR- W1-2-020118	3535, 8321A	T	316.4 g	27.8 g	288.6 mL	5 mL	0.1 mL	
280-106036-D-21	FAY-D-4065SPNSH- W1-1-020118	3535, 8321A	Т	326.4 g	28.1 g	298.3 mL	5 mL	0.1 mL	
280-106036-A-22	FAY-D-4065SPNSH- W1-2-020118	3535, 8321A	T	302.7 g	28.0 g	274.7 mL	5 mL	0.1 mL	

Batch Notes					
Acid ID	2% Formic Aci_00142				
Acid Name	2% Formic Acid				
Balance ID	24350888				
Batch Comment	Reviewer:CDC				
First End time	02/11/18 2019				
H2O ID	HPLC_Water_00852				
Pipette ID	P, SPE-1+ syringe				
Reagent ID	10% NH4OH				
Reagent Lot Number	10% NH4OH_00118				
Solvent Lot #	Methanol_00190				
Solvent Name	Methanol				
SOP Number	DV-OP-0019				
SPE Cartridge Type	STRATA-X-AW (8B S038 FCH)				
Solid Phase Extraction Disk ID	S308-0079				
First Start time	02/11/18 1933				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8321A Page 1 of 2

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Batch Number: 404556 Batch Start Date: 02/11/18 19:22 Batch Analyst: Cokley, Cheyana D

Batch Method: 3535 Batch End Date: 02/11/18 21:53

Basis	Basis Description
Т	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8321A Page 2 of 2

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Batch Number: 404557 Batch Start Date: 02/11/18 19:44 Batch Analyst: Cokley, Cheyana D

Batch Method: 3535 Batch End Date: 02/11/18 21:56

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	HFPO I.S. 00008	HFPO Spike 00004
MB 280-404557/1		3535, 8321A				250 mL	5 mL	0.1 mL	
LCS 280-404557/2		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-404557/3		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LLCS 280-404557/4		3535, 8321A				250 mL	5 mL	0.1 mL	0.01 mL
280-106036-A-23	FAY-D-4057SPNSH- W1-1-020118	3535, 8321A	T	307.1 g	28.4 g	278.7 mL	5 mL	0.1 mL	
280-106036-A-24	FAY-D-7265NC87H- W1-1-020118	3535, 8321A	T	312.1 g	26.9 g	285.2 mL	5 mL	0.1 mL	
280-106036-C-25	FAY-D-7394NC87H- W1-1-020118	3535, 8321A	Т	309.1 g	27.3 g	281.8 mL	5 mL	0.1 mL	
280-106036-A-26	FAY-D-6711CHKFT- W1-1-020118	3535, 8321A	T	317.7 g	27.6 g	290.1 mL	5 mL	0.1 mL	

Batch	Notes
Acid ID	2% Formic Aci_00142
Acid Name	2% Formic Acid
Balance ID	24350888
Batch Comment	Reviewer:CDC
First End time	2.11.18@2033
H2O ID	HPLC_Water_00852
Pipette ID	P, SPE-1+ syringe
Reagent ID	10% NH4OH
Reagent Lot Number	10% NH4OH_00118
Solvent Lot #	Methanol_00190
Solvent Name	Methanol
SOP Number	DV-OP-0019
SPE Cartridge Type	STRATA-X-AW (8B S038 FCH)
Solid Phase Extraction Disk ID	s308-0079
First Start time	2.11.18@1952

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8321A Page 1 of 2

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Batch Number: 404557 Batch Start Date: 02/11/18 19:44 Batch Analyst: Cokley, Cheyana D

Batch Method: 3535 Batch End Date: 02/11/18 21:56

Basis	Basis Description
Т	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8321A Page 2 of 2

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Batch Number: 404582 Batch Start Date: 02/12/18 08:23 Batch Analyst: Atkinson, Hannah M

Batch Method: 3535 Batch End Date: 02/12/18 13:32

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	HFPO I.S. 00007	HFPO Spike 00004
MB 280-404582/1		3535, 8321A				250 mL	5 mL	0.1 mL	
LCS 280-404582/2		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-404582/3		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LLCS 280-404582/4		3535, 8321A				250 mL	5 mL	0.1 mL	0.01 mL
280-106036-C-39	FAY-D-3322DANDE- W1-1-020118D	3535, 8321A	Т	279.5 g	28.3 g	251.2 mL	5 mL	0.1 mL	
280-106036-D-40	FAY-D-4057SPNSH- W1-2-020118	3535, 8321A	Т	280.5 g	28.6 g	251.9 mL	5 mL	0.1 mL	
280-106036-D-41	FAY-D-5085MRSHR- W1-1-020118	3535, 8321A	Т	279.4 g	28.5 g	250.9 mL	5 mL	0.1 mL	
280-106036-C-42	FAY-D-FB-020118	3535, 8321A	T	277.3 g	28.8 g	248.5 mL	5 mL	0.1 mL	
280-106036-B-43	FAY-D-FB-020118- A	3535, 8321A	Т	275.8 g	29.0 g	246.8 mL	5 mL	0.1 mL	

Bat	tch Notes
Acid ID	2% Formic Aci_00142
Acid Name	2% Formic Acid
Balance ID	24350888
Batch Comment	Reviewer:jm
First End time	1032
H2O ID	HPLC_Water_00853
Pipette ID	m2, SPE-1+ syringe
Reagent ID	10% NH4OH
Reagent Lot Number	10% NH4OH_00118
Solvent Lot #	Methanol_00190
Solvent Name	Methanol
SOP Number	DV-OP-0019
SPE Cartridge Type	STRATA-X-AW (8B S038 FCH)
Solid Phase Extraction Disk ID	S308-0079
First Start time	940

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8321A Page 1 of 2

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Batch Number: 404582 Batch Start Date: 02/12/18 08:23 Batch Analyst: Atkinson, Hannah M

Batch Method: 3535 Batch End Date: 02/12/18 13:32

Basis	Basis Description
Т	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Page 2 of 2

Page 655 of 711

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Batch Number: 404785 Batch Start Date: 02/13/18 11:30 Batch Analyst: Bourgery, David F

Batch Method: 3535 Batch End Date: 02/13/18 15:08

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	HFPO I.S. 00008	HFPO Spike 00004
MB 280-404785/1		3535, 8321A				250 mL	5 mL	0.1 mL	
LCS 280-404785/2		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LLCS 280-404785/3		3535, 8321A				250 mL	5 mL	0.1 mL	0.01 mL
LCSD 280-404785/4		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
280-106036-D-27	FAY-D-6416CHKFT- W1-1-020118	3535, 8321A	T	324 <b>.</b> 1 g	27.6 g	296.5 mL	5 mL	0.1 mL	
	FAY-D-6591BUTLE- W1-1-020118	3535, 8321A	Т	321.6 g	28.3 g	293.3 mL	5 mL	0.1 mL	
280-106036-D-29	FAY-D-7149BUTLE- W1-1-020118	3535, 8321A	Т	314.1 g	27.9 g	286.2 mL	5 mL	0.1 mL	
280-106036-A-30	FAY-D-7243BUTLE- W1-1-020118	3535, 8321A	T	316.2 g	28.4 g	287.8 mL	5 mL	0.1 mL	
280-106036-B-31	FAY-D-5049MATTH- W1-1-020118-D	3535, 8321A	Т	303.5 g	28.7 g	274.8 mL	5 mL	0.1 mL	
280-106036-B-32	FAY-D-7609TABOR- W1-1-020118	3535, 8321A	T	307.7 g	30.5 g	277.2 mL	5 mL	0.1 mL	
280-106036-C-33	FAY-D-7741TABOR- W1-1-020118	3535, 8321A	T	302.9 g	30.6 g	272.3 mL	5 mL	0.1 mL	
280-106036-A-34	FAY-D-FB-020118- B	3535, 8321A	T	317.2 g	28.4 g	288.8 mL	5 mL	0.1 mL	
280-106036-A-35	FAY-D-47MAUDI-W1 -1-020118	3535, 8321A	Т	302. g	30.3 g	271.7 mL	5 mL	0.1 mL	
280-106036-C-36	FAY-D-47MAUDI-W1 -2-020118	3535, 8321A	T	306. g	29.5 g	276.5 mL	5 mL	0.1 mL	
280-106036-A-37	FAY-D-1123NC20H- W1-1-020118	3535, 8321A	T	312. g	30.7 g	281.3 mL	5 mL	0.1 mL	
280-106036-A-38	FAY-D-3322DANDE- W1-1-020118	3535, 8321A	Т	319. g	30.1 g	288.9 mL	5 mL	0.1 mL	
280-106036-B-38 DU	FAY-D-3322DANDE- W1-1-020118	3535, 8321A	Т	332.7 g	29.4 g	303.3 mL	5 mL	0.1 mL	
280-106036-C-38 MS	FAY-D-3322DANDE- W1-1-020118	3535, 8321A	T	329.9 g	29.7 g	300.2 mL	5 mL	0.1 mL	0.1 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8321A Page 1 of 2

Lab Name: TestAmerica Denver Job No.: 280-106036-1

SDG No.:

Batch Number: 404785 Batch Start Date: 02/13/18 11:30 Batch Analyst: Bourgery, David F

Batch Method: 3535 Batch End Date: 02/13/18 15:08

Batch Notes							
Acid ID	2% Formic Aci_00142						
Acid Name	2% Formic Acid						
Balance ID	24350888						
Batch Comment	Reviewer: AMB						
First End time	02/13/18 1330						
H2O ID	HPLC_Water_00853						
Pipette ID	M2, SPE-1+ syringe						
Reagent ID	10% NH4OH						
Reagent Lot Number	10% NH4OH_00118						
Solvent Lot #	Methanol_00190						
Solvent Name	Methanol						
SOP Number	DV-OP-0019						
SPE Cartridge Type	STRATA-X-AW (8B S038 FCH)						
Solid Phase Extraction Disk ID	\$308-0079						
First Start time	02/13/18 1145						

Basis	Basis Description
Т	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.





HFPO\_CAL-0\_00032

Description:

No. of Bottless; Storage Location

Reagent Volume: · Creation Date: ----

Open Date: Container(e): Comment

Blank \* **LCM9** 

1,000 mL 02/08/2018

4958304 ICB

Expiration Date: Laboratory:

Prepared By: Solvent Solvent Lot:

02/22/2018

TestAmerica Cenver Meyer, Andrew GC PFC\_DII\_Solveni 00016

# Respent Analyte Information

Analyte 1903 FEF COM	Source (D HFPO 1.8_00008	Source Exp. Date	Source Cons.	Source Cons. Units	Final Conc.	Pinal Conc. Unita
	and a second state of the second seco	12/12/2018	0.80000	W/mL	10.00000	USE.
19C3 HFPO-DA (18)	HFFO 1.8_00008	12/12/2018	0.80000	ug/mL	10.00000	w.A.

## Source Reagents

Respons	Description	Туре	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume	Volum
HFPO I.B00006	Internal Standard for HFPO 0.6ug/ml	***************************************	12/12/18	***************************************			20.00000	u.

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02/08/2018 14:41





HFPO\_CAL-1\_00032

Description:

No. of Bottles; Storage Location:

Reagent Volume: Creation Detec---- 02/08/2018 ---

Open Date: Container(s): Comment:

level1 LCMS

4958305

level-1

1.000 mL

Expiration Date: Laboratory: Prepared By:

Solvent Solvent Lot 02/22/2018

TeelAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

00018

# Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Cons.	Source Cons. Units	Pinei Conc.	Final Conc. Units
1503 H <b>FPO-DA</b>	HFPC <b>I</b> S. <b>_0008</b>	12/12/2018	0.80000	ug/mL	10.00000	VQ/L
19C3 HFPO-DA (IS)	HFPO I.B_00008	12/12/2018	0.80000	ug/mL	10.00000	w/L
Perfluoro(2-proponypropanoio) aoid	HFPO 8plbs_00004	10302018	0.80000	ug/mL	0.28000	ugs.

#### Source Reagents

Reagent	Description	Тура	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volum: Units
ou can orest menonem	Internal Standard for HFPO O.Scolmi		12/12/18				20.00000	ul.
HPPO Spike_00004	HFPO LCS Calibration Spike 0.5ug/ml		1030/18				0.80000	ui.

Musiga ordinalis

02/08/2018 14:43





HFPO\_CAL-2\_00033

Description:

No. of Bottles:

Storage Location: Reegent Volume: Greation Date: --- -- 02/08/2018 --- -- --

Open Dale: Container(e): Comment:

level2 LCMS 1.000 mL

4956307 level-2

Expiration Date: Laboratory: Prepared By:

Solvent: Solvent Lot: 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Metherol: H2O

00016

## Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Unite
<b>1809 H</b> FPO DA	HFPO I.S_00008	12/12/2018	0.80000	<b>Ug/mL</b>	10.00000	W/L
19C3 HFPO-DA (IS)	HFPO I.8_00008	12/12/2018	0.0008.0	ug/mL	10.00000	ug/L
Periliuxo(2-proposypropenoic) add	HFPO Spike_00004	10/80/2018	0.80000	ug/mL	0.80000	ug/L

#### Source Response

Respons	Description	Туре	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot#	Volume Used	Volum Unite
HFPO I.B_00008	Internal Standard for HFPO C.Sushral	•	12/12/18				20.00000	u.
HFPO Spile_00004	HFPO LCS Celibration Spike 0.5ug/ml		10/30/18				1.00000	u.

02/08/2018 14:44





HFPO\_GAL-3\_00032

Descriptions No. of Bottles:

Storage Location: Respent Volume: Creation Date:

Open Date: Container(s): Comment

level3 4 LCMS 1.000 mL

4950309 level-3

02/08/2018

Expiration Date: Laboratory: Prepared By:

Solvent Solvent Lot: 02/22/2018

TeelAmerica Denver Meyer, Andrew GC 80:20 Metherol : H2O

00016

## Reagent Analyte Information

Analyte	Bouroe ID	Source Exp. Date	Source Conc.	Source Cons. Units	Final Conc.	Final Conc. Units
13C3 HFPC-DA	HFPO I.8_00008	12/12/2018	0.80000	ig/ini.	10.00000	ug/L
18C3 HFPO-DA (18)	HFPO 1.8_00008	12/12/2018	0.60000	ugmL	10.00000	ug/L
Parliuoro(2-propoxypropanolo) sold	HFPO Spike_00004	10/30/2018	0.80000	ug/mL	1.00000	ug/L

#### Source Reagents

Resgent	Description	Тура	Expiration	Vendor	Vendor Lot#	Vendor Cat Lot #	Volume Used	Volum Units
HFPO I.S00008	Informal Standard for HFPO 0.5up/mi		12/12/18	***************************************		***************************************	20.00000	u.
HF70 8plba_00004			10/30/18				2.00000	uŁ

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02/08/2018 14:46





HFPO\_CAL-4\_00032

Description: No. of Bottles: Storage Location: Respent Volume:

level4 1 LCMS 1.000 mL - 02/08/2018 - - -

Creation Date: ----Open Date:
Container(s):
Comment:

4956319 |mal-4 Expiration Date:

Laboratory: Prepared By: Solvent: Solvent Lot: 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol: H2O

00018

## Reagent Analyte Information

Analyte	Source ID	Bource Exp. Date	Source Cons.	Source Conc. Units	Cone.	Final Conc. Units
1000 F <b>1000</b>	HFFC 1.300008	12/12/2018	0.500.00	ug/mL	10,000,00	nà/r
19C3 HFPO-DA (18)	HFPO 1.8_00008	12/12/2018	0.80000	ug/mL	10.00000	w/L
Parfluoro(2-propoxypropanolo) aod	HFPO Spille_00004	10/30/2018	0.80000	ug/mL	2.00000	ug/L

## Source Reagents

<b>*****</b>	Description	Турю	Expiration	Vendor	Vendor Lot#	Vendor Cat Lot #	Volume Used	Volum Units
HFPO I.8_00008	Internal Standard for HFPO 0.8uo/ml	***************************************	12/12/18	***************************************			20.00000	WL.
	HFPO LCS/Calibration Spike 0.5ug/ml		10/30/18				4.00000	ii.

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02/08/2018 14:47

Pege 1 of 1





HFPO\_GAL-6\_00080

Descriptions

No. of Bottles: Storage Location:

Reagent Volume: Creation Date: --- 02/08/2018: --- 100

Open Date: Container(s): Comment

level5 LCMS

4056337

level-5

1.000 mL

Expiration Date: Laboratory: Prepared By: Solvent: Solvent Lot

02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol: H2O

00016

Resgent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	<b>Final</b> Cons.	Final Cone. Units
<b>1803</b> HEPO-DA	HFPO I.8_00008	12/12/2018	0.50000	ug/ml.	0.00000	W/L
13C3 HFPO-DA (18)	HFPO 1.8_00008	12/12/2018	0,50000	up/mL	10.00000	ug/L
Perfluoro(2-propasypropenolo) adid	HFFO 8plke_0004	10/30/2018	0.80000	ug/mL	8.00000	ug/L

#### Source Reagents

Respont	Description	Туря	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Üsed	Volum Units
HFPO I.B_00008	Internal Standard for HFPO 0.8.m/ml		12/12/18	***************************************			20.00000	uL.
HFPO 8plke_00004			10/30/18				10.00000	ul.

02/08/2018 14:48





HFPO\_CAL-6\_00080

**Description:** No. of Bottles: Storage Location

Reagent Volume:

Creation Date:-Open Date: Container(s): Comment

levei6 1 LCMS

4986336

level-6

1.000 mL 02/08/2018 -

Expiration Date: Laboratory: Prepared By:

Solvent: Solvent Lot: 02/22/2018

TeelAmerica Denver Meyer, Andrew GC 80:20 Metherol: H2O

00018

# Reagent Analyte Information

Analyto	Source ID	Source Exp. Date	Source Cona	Source Conc. Units	Final Com.	Final Conc. Units
13C3 HFPO-DA	HFPO L8_00008	<b>12/1</b> 2/2018	0.80000	WinL	10.00000	W.
13C3 HFPC-DA (88)	HFPO I.S00008	12/12/2016	0.80000	ug/mL	10.00000	w
Perfluoro(2-propoxypropenoic) acid	HFFO 8ples_0004	10/30/2018	0.50000	ug/mL	10.00000	₩/L

#### Source Reagents

Respont	Description	Туре	Expiration	Vendor	Vendor Lot#	Vendor Cat Lot #	Volume Used	Volum Unite	
HFPO I.B_00008	Internal Standard for HFPO 0.8up/ml		12/12/18	***************************************			20.00000	uL.	
HFPO 8pile_0004	HFPÖ LÖĞĞəlibəlikin Bakıs ü.bəsimi		10/30/18				20.0000	uL.	

Sport of the 71/4/15

02/08/2018 14:49





HFPO\_CAL-7\_00032

Description: No. of Bottles:

Storage Location: Reagent Volume: Creation Date: 02/08/2018

Open Date: Container(s): Comment:

level7 LCMS 1.000 mL

4958339

level-7

Expiration Date: Laboratory: Prepared By: Solvent: Solvent Lot

02/22/2018 TeefAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

00016

## Respont Analyte Information

Analyte	Soums ID	Source Exp. Date	Source Conc.	Source Conc. Units	Finai Cono.	Final Conc. Units
1303 (490-0)	HFPO 1.00,0008	12/12/2018	0.50000	UÇ/ITIL	10,000,00	ug/L
1909 HFPO-DA (IS)	HFPO I.S_00008	12/12/2018	0.80000	w/mL	10.00000	w.
Perfluoro(2-propoxypropensic) sold	HFPO 8pike_00004	10/30/2018	0.80000	ug/mi.	25.00000	ug/L

#### Source Reagents

Respons	Description	Тура	Expiration	Vendor	Vendor Lot 8	Vendor Cal Lot#	Volume Used	Volum Units
HFPO I.8_00008	internal Standard for HFPO O.Suphel	***************************************	12/12/18	***************************************			20.00000	<b></b>
HFPO 8plike_00004	HFPO LCS/Cellbration Spike 0.64g/ml		10/30/18				80.00000	uL.

02/08/2018 14:80





HFPO\_CAL-8\_00032

Description: No. of Bottles:

Storage Location: Reagent Volume; Creation Date:

Open Date: Container(s): Comment

level8 4

1.000 mL 02/08/2018

LCMS

4966340

level-8

Expiration Date:

Laboratory: Prepared By: Solvent: Solvent Lot: 02/22/2018

TeelAmerica Denver Meyer, Andrew GC 80:20 Methanol: H2O

00018\_\_\_

# Reagent Analyte Information

Analyta	Source (D	Source Exp. Date	Source Conc.	Source Conc. Units	Final Cone.	Final Conc. Units
190 <b>3</b> HFPO-DA	HFFC 1.8_00008	12/12/2018	0.80000	ug/ml.	10,00000	ug/L
13C3 HFPO-DA (18)	HFPO I.8_00006	12/12/2018	0.80000	ug/mL	10.00000	₩ <b>/</b> L
Perfluoro(2-propoxypropensio) esid	HFPO Spike_00004	10/30/2018	0.80000	ug/mL	80.00000	w/L

#### Source Reagents

Resgent	Description	Турю	, Expiration	Vendor	Vendor Let#	Vendor Cai Lot #	Volume Used	Volume - Units
HFPO I.S00008	Internal Standard for		12/12/18	······································		***************************************	20.00000	u.
			10/30/18				100.00000	
	Spike 0.8ug/ml						son and the	w.

02/08/2018 14:52





HFPO\_CAL-0\_00001

Description:

No. of Bottles: Storage Location

Storage Location; Reegent Volume: Creation Date:

Open Date; Container(e): Comment: level8 1 LCMS 1.000 mL 02/08/2018

4956342 level-9 Expiration Date: Laboratory: Prepared By:

Solvent: Solvent Lát: 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol: H2O

00018

## Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Bource Conc. Unite	Final Cons.	Final Cons. Units
18C8 HFPO OA	HFPO I.S00008	<b>12/1</b> 2/2018	0.80000	nð,wr	10,00000	w.L
13C3 HFPO-DA (IB)	HFPO I.8_00008	12/12/2018	0.80000	ug/mL	10.00000	w
Perfluoro(2-propoxypropenoic) add	HFPO Spike_00004	10/30/2018	0.50000	ug/ml.	100.00000	ug/L

### Source Reagents

Reagent Des	wiption Type	Expiration	Vendor	Vendor Lot#	Vendor Cat Lot #	Volume Vsed	Volum Unite	
HFPO I.B_00008 Injum	el Standard for C.Sugmi	12/12/18				20.00000	ul.	
	) LCS/Calibration	10/30/18				200.00000	uL.	

Phunge 1941. Wig

02/08/2018 14:54





HFPO\_ICV\_00034

Description: No. of Bottles:

Storage Location: Reagon! Volume: Creation Date:

Open Date: Container(s): Comment

ICV LCMS 1.000 mL 02/08/2018

4968341 ICV

Expiration Date: Laboratory: Prepared By: Solvent: Solvent Lot

02/22/2018 TestAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O 00016

Reagent Analyte Information

Analyte	Source ID	8ouros Exp. Date	Source Conc.	Source Conc. Unite	Final . Cons.	Final Cono. Units
18C3 HFFO-DA	<b>H</b> FPO I.S000 <b>08</b>	12/12/2018	0.50000	ug/mL	10.00000	W/L
13C3 HFPO-DA (18)	HFPO I.S_00008	12/12/2018	0.80000	ug/mL	10.00000	W/L
Perfluoro(2-propoxypropensis) acid	HFPO ICV_00001	11/03/2018	0.19800	ug/mL	1.95000	w/L

#### Source Reagents

Respont	Description	Туре	Expiration	Vendor	Vendor Lot 8	Vendor Cat Lot #	Volume Used	Volum Unite
HFPO I.S_00008	Internel Standard for HFPO 0.8up/ml		12/12/18	***************************************			20.00000	WL.
HFPO ICV_00001	ICV HFPO parany		11/03/18				10.00000	u.

11/4/4

02/08/2018 14:53





HFPO\_GAL-0\_00032

Description

No. of Battless

Storage Location: Reagent Volume: Greation Date: ----

Open Date: Container(e): Comment Blank 1

LCMS 1.000 mL 02/08/2018

4958304

ICB

Expiration Date:

Laboratory: Prepared By:

Solvent Solvent Lot: 02/22/2018

TestAmerica Denver Meyer, Andrew GC PFC\_DII\_Solvent

00018

# Reagent Analyte Information

Analyte 1803 HFPO-DA	Source ID	Bource Exp. Date	8ourne Conc.	Source Cons. Units	Final Conc.	Pinal Conc Units
	narvi <b>i.oww</b>	12/12/2018	0.80000	ug/ml.	10.00000	w/L
19C8 HFPO-DA (18)	HFFO I.B00008	12/12/2018	0,800000	ug/mi.	10.00000	un/L

## Source Reagents

Respons	Description	Туре	Expiration	Vendor	Vendor Lot #	Vendor Cert Lot #	Volume Clear	Volume
HFPO I.8_00008	Internal Standard for HFPO 0.6ug/ml		12/12/18				20.00000	uL.

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02/08/2018 14:41





HFPO\_CAL-1\_00032

Description:

No. of Bottles:

Storage Location: Reagent Volume:

Open Date:

Container(s): Comment:

level1 1

LCMS 1.000 mL Creation Date: ---- 02/08/2018

4956308

level-1

Expiration Date: Laboratory: Prepared By:

Solvent Solvent Lot 02/22/2018

TeetAmerica Denver Meyer, Andrew GC 80:20 Methanol: H2O

00018

# Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Cons. Units	Final Cone.	Final Conc. Units
13C3 HEPCOA	14FPO <b>1</b> 5_00000	12/12/2/18	0.80000	w/mL	10.00000	WIL
19C3 HFPO-DA (I®)	HFPO I.8_00006	12/12/2018	0.50000	₩/mL	10.00000	w/L
Perfluoro(2-propoxypropensio) sold	HFPO Spline_00004	10/30/2018	0.50000	wm.	0.28000	ug/L

#### Source Reagents

· Kongent	Description	Туре	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volum Unite
	Internal Standard for HEPO 0.5up/ml	***************************************	12/12/18				20.0000	uL.
	HFPO LOS/Calibration Spike 0.5ug/ml		1030/18				0.80000	ul,

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02/08/2018 14:43





HFPO\_GAL-2\_00033

Description: No. of Bottles:

level2 Storage Location: LCMS
Reagent Volume: 1.000 mL
Creation Data: --- 02/08/2018 --- --

Expiration Date: Laboratory: Laboratory: Prepared By: Solvent: Solvent Lot:

02/22/2018 TeelAmerica Denver

Meyer, Andrew GC 80:20 Methanol : H2O

00016

Open Date:

Container(e): Comment

4956307 level-2

## Reagent Analyte Information

Analyto	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Mnai Cons.	Final Conc. Units
<b>1863</b> (1870-04	HFFC I.S00008	12/12/2018	0.80000	w/mi.	10.0000	ug/L
18C3 HFPO-DA (8)	HFPO I.S_00008	12/12/2018	0.80000	ug/mL	10.00000	ug/L
Perfluoro(2-proposypropenoio) sold	HFPO 8p80_00004	10/30/2018	0.80000	ug/mL	0.80000	wL

## Source Reagents

	Description	Тура	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Veed	Volum Units
nrrvawwo	HEPO D.Bushni		12/12/16	***************************************		······	20.00000	W.
HFPO Epilog_00004	HFPO LCO/Calibration Spike 0.8ug/ml		10/30/18				1.00000	u.

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02/08/2018 14:44

Pege 1 of 1





HFPO\_CAL-3\_00032

Description No. of Bottlee:

Storage Location: Reagent Volume: Creation Date: ---02/08/2018

Open Date: Container(e): Comment

level3 4 LCMS 1.000 mL

4958309 level-3

Expiration Date: Laboratory: Prepared By:

Solvent: Solvent Lot 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methenol: H2O

00016

# Reagent Analyte Information

Analyte	Source (D	Source Exp. Date	Source Conc.	Source Conc. Units	final Conc.	Final Conc. Units
19C3 HFPO-DA	HFPO I.8_00008	12/12/2018	0.80000	<b>W</b> ym.	10.0000	ug/L
18C3 HFPO-DA (IB)	HFPO I.S_00008	12/12/2018	0.60000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropenois) adid	HFPO 8plic_00004	10/30/2018	0.80000	ugini.	1.00000	<b>u⊘</b> L

#### Source Reagents

Respons	Description	Туре	Expiration	Vendor	Vendor Lot#	Vendor Cat Lot #	Volume Used	Volum Units
HFPO L8_00008	Internal Standard for		12/12/18	***************************************	······		20.00000	uL
HFFO Spike_00004	HFPO 0.5ug/ml HFPO LCB/Calibration		10/30/18				2.00000	
,	Spike 0.6ug/mi						***************************************	ui.

Boise, ON/ASING

02/08/2018 14:45





HFPO\_CAL4\_00032

Description: No. of Bottles: Storage Location: Reagent Volume:

level4 1 LCMS 1,000 mL --02/08/2018 - --

Creation Date: ---Open Date:
Container(s):
Comment:

level-4

Expiration Date: Laboratory: Prepared By: Solvent:

02/22/2018 TestAmerica Denver Meyer, Andrew GC 80:20 Methenol : H2O 00018

Solvent Lat 00016

# Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Finai Conc	Final Conc. Units
18C8 HFPO-DA	HE OLE COUR	12/12/2016	0.50000	winL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO I.8_00008	12/12/2018	0.80000	<b>upi</b> mL	10.00000	w/L
Perfluoro(2-propoxypropanolo) acid	HFPO Spling_00004	10/30/2018	0.80000	ug/mL	2.00000	w.

## Source Reagents

Respons	Description	Туре	Expiration	Vendor	Vendor Lot #	Vendor Cet Lot #	Volume Used	Volum Units
HFPO I.S_00008	n wan we company of lot		12/12/18	***************************************		***************************************	20.00000	
HFPO Sylke_00004	HFPO 0.8 up/ml HFPO LCB/Ce8bradon Bolke 0.6 up/ml		10/30/18				4.00000	ul.

Robert Calaba

02/08/2018 14:47





HFPO\_CAL-8\_00080

Description: No. of Bottles:

Storege Location: Reagent Volume:

Open Date: Container(s): Comment

level5 LCM8 1.000 mL Creation Date: --- 02/08/2018 ---

> 4968337 level-5

Expiration Date: Laboratory: Prepared By: Solvent: Solvent Lot

02/22/2018 TestAmerica Denver Meyer, Andrew GC 80:20 Methanol: H2O 00018

#### Reagent Analyte Information

Analyta	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
<b>1863</b>   676 U.A	F <b>PO I.8_</b> 30008	12/12/2018	0.50000	w/mL	10.00000	ug/L
19C3 HFPO-DA (IS)	HFPO I.8_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Forfluoro(2-proposyproperato) edid	HFPO Spike_00004	10/30/2018	0.80000	ug/mL	6.0000	ug/L

#### Source Reagents

Respont	Description	Туре	Expiration	Vendor	Vendor Lot#	Vendor Cat Lot #	Volume Used	Volum Units
HFPO I.8_00008	Internal Standard for HFPO 0.5up/ml		12/12/18				20.00000	uL.
HFPO 8pilee_00004	HFPO LCS/Casbrellon		10/30/18				10.00000	uL.

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02/08/2018 14:48





HFPO\_GAL-8\_00080

Description No. of Bollies:

Storage Location: Respent Volume: Creation Date:

levei6 4 LCMS 1.000 mL 02/08/2018 -

Expiration Date: Laboratory: Prepared By: Solvent: Solvent Lot:

02/22/2018 TeelAmerica Denver Meyer, Andrew GC 80:20 Methanol: H2O 00016

Open Date: Container(s): Comment

4958338 levei-6

#### Reagent Analyte Information

Arealyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Pinal Conc.	Final Conc. Units
18C3 HFPO-DA	80000 <b>3.</b> 1.049.H	12/12/2016	0.80000	ug/mL	10.00000	W.
18C3 HFPO-DA (IB)	HFPO !.8_00008	12/12/2018	0.50000	ug/mL	10.00000	w.
Perfluoro(2-propoxypropenois) acid	HFFFO 8p8eq_00004	10/20/2018	0.50000	ug/mL	10.00000	u.

#### Source Reagents

Reagent	Description	Турю	Expiration	Vendor	Vendor Lot#	Vendor ** Cat Lot #	Volume Used	Volum Units
HFPO I.8_00008	Internal Standard for HFPO 0.8us/mi		12/12/18				20.00000	uĹ
HFFC 8pha_00004	HFPÖ LCS Calibration Spike 0.5ug/ml		10/30/18				20,00000	u.

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02/08/2018 14:49





Roagent ID;

HFPO\_CAL-7\_00032

Description: No. of Battles: Storage Location:

Reagent Volume: Creation Date:

Open Date: Container(s): Comment:

level7

LCMS 1.000 mL 02/08/2018

4050330

level-7

Expiration Date: Leboratory: Prepared By: Solvent: Solvent Lot

02/22/2018 TestAmerica Denver Meyer, Andrew GC 80:20 Methanol: HZO 00018

## Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	8ource Conc.	Source Conc. Units	final Conc.	Final Conc. Units
<b>1803</b> (4990)-0.00	FFO LB_00008	12/12/2018	0.80000	ug/ml.	10 00000	ug/L
18C3 HFPO-DA (IB)	HFPO I.8_00008	12/12/2018	0.80000	ug/mL	10.00000	ug/L
Parficoro(2-proposypropanolo) acid	HFPO Spile_00004	10/30/2018	0.80000	ug/mL	26.00000	ug/L

## Source Reagents

Respect	Description	Тура	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volum Units
HFPO I.800008	internal Standard for HFPO 0.8ug/ml		12/12/18	***************************************			20.00000	u.
HFPO Bplke_00004	HFPO LCS/Calibration Spike 0.6ug/ml		10/30/16				60,00000	uL

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02/08/2018 14:50





HFPO\_CAL-8\_00032

Description

No. of Bottles:

Storage Location Resgent Volume: Creation Date:

Open Date: Container(s): Comment

level8 1

LCMS 1.000 mL

02/08/2018 4956340

level-8

Expiration Date: Laboratory: Prepared By:

Bolvent: Solvent Lot: 02/22/2018

TeelAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

00018

Reagent Analyte Information

Ansiyte	Source ID	Scurce Exp. Date	Source Cona	Source Conc. Unite	Final Conc.	Final Conc. Units
13C <b>3</b> HPPO-DA	HFPO 1.9_00008	12/1 <b>2/201</b> 1	0.50000	w/mL	10.0000	w/L
13C3 HFPO-DA (16)	HFPO I.8_00008	12/12/2018	0.80000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxyproperado) acid	HFPO Spike_00004	10/30/2018	0.80000	ug/mL	80.00000	w/L

#### Source Reagents

Reagent	Description	Тура	<sup>'</sup> Explation	Vendor	Version Let 8	Vendor Cat Lot #	Volume Used	Volume Units
HFPO I.E_00008	Internal Standard for		12/12/18	***************************************	***************************************	***************************************	20.00000	u.
HFPO 8pile_00004	HFPO 0.5ug/ml HFPO LCS/Calibration Scales 0.5us/ml		10/30/18				100.00000	ui.

whih.

02/08/2018 14:52





HFPO\_CAL-9\_00001

Description: No. of Bottles:

No. of Bottles; Storage Location; Reegent Volume:

Creation Date: Open Date: Container(s):

Comment

level0 1 LCMS

1.000 mL 02/08/2018

4956342 level-9 Expiration Date:

Leboratory: Prepared By: Solvent: Solvent Lot: 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

80:22 00018

## Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
19C3 HPPO-UA	HFPO I.S_00008	12/12/2018	0.800.00	ug/mL	10.00000	Ug/L
1909 HFPO-QA (IS)	HFPO (.800008	12/12/2018	0.80000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropenoic) add	HFPO Spike_00004	10/30/2018	0.50000	ug/mL	100.00000	wL

#### Source Reagents

Respont	Description	Туре	Expiration	Vendor	Vendor Lot#	Vendor Cet Lot #	Volume Used	Volum Units
HFPO I.8_00008	Infernal Blanderd for HFPO 0.0µp/ml	***************************************	12/12/18	***************************************			20.00000	uL.
HFPO Spike_00004	HFPO LCS/Calibration		10/30/18				200.0000	ul.

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02/08/2018 14:84





HFPO\_ICV\_00034

Description: No. of Bottles:

Storage Location: Reegent Volume: Creation Date:

Open Date: Container(e): Comment

ICV 8 LCMS 1.000 mL 02/08/2018

4958341 ICV

Expiration Date: Laboratory: Prepared By: Solvent Solvent Lot:

02/22/2018 TestAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O 00016

## Respent Analyte Information

Analyte	Source ID	Source Exp. Date	8ouros Cono.	Source Conc. Units	Final : Cono.	Final Conc. Units
1808 HFPO-CA	HFFC 1.8_00008	12/12/2018	0.80000	ug/mL	10.00000	WL.
19C3 HFPO-DA (18)	HFPO I.S_00008	12/12/2018	0.80000	ug/mL	10.00000	w/L
Perituoro(2-proposypropanoic) acid	HFPO ICV_00001	11/03/2018	0.19800	ug/mL	1.95009	w.

#### Source Reagents

Rougeni	Description	Type	,	Expiration	Vendor	Vendor Lot 8	Vendor Cat Lot #	Volume Used	Volum Units
HFPO I.8_00008	Internal Standard for		*******	12/12/18	······································		***************************************	20.00000	uL.
HFPO KV_00001	HEPO Caughti KCV HEPO pareny			11/03/18				10.00000	uL

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02/08/2018 14:53





HFPO\_CAL-0\_00032

Description:

No. of Bottles: Storage Location:

Sicrage Location
Respent Volume;
Creation Date: ----

Open Date: Container(e); Comment: Blenk 1

LCMS 1.000 mL 02/08/2018

4958304 ICB Expiration Date:

Laboratory: Prepared By:

Solvent Solvent Lot 02/22/2018

TestAmerica Denver Meyer, Andrew GC PFC\_DIILSolvent

00010

# Reagent Analyte Information

Analyte 1908 (FRO) (SA	Bouros (D	Bource Exp. Date	Source Conc.	Source Cons. Units	Final Conc.	Pinal Conc. Units
	######################################	12/12/2018	0.50000	ug/mL	10.0000	888.
19C3 HFPO-DA (18)	HFPO I.S00006	12/12/2018	0.80000	ug/mi.	10.00000	un/L

# Source Reagents

Respons	Description	Туре	Expiration	Vendor	Vendor Lot#	Vendor Cat Lot #	Volume Used	Volum Unite
HFPO I.B_00008	Internal Standard for HFPO 0.6ug/ml	***************************************	12/12/18	***************************************		***************************************	20.0000	**************************************

Parings.

02/08/2018 14:41





HFPO\_GAL-1\_00032

Descriptions

No. of Bottles: Storage Location:

Respent Volume:

Open Date: Container(s): Comment:

level1 LCMS

4956305

level-1

1.000 mL

Creation Dete:-- · 02/08/2018 · · · ·

Expiration Date: Laboratory:

Prepared By: Solvent: Solvent Lot

02/22/2018

ToolAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

00016

Reagent Analyte Information

Ansiyte	Source ID	Source Exp. Date	Source Cona	Source Conc. Units	Final Cone,	Pinel Conc. Units
1 <b>3C3 HF</b> FO-DA	HEPO <b>I</b> S <b>, 00</b> 00	12/12/2016	0.50000	ug/mL	10.0000	88%.
13C3 HFPO-DA (IB)	HFPO I.8_00008	12/12/2018	0.80000	ug/mi.	10.00000	ug/L
Perfluoro(2-propoxypropenoio) acid	HFPO 8plks_00004	10/30/2018	0.80000	w/ml.	0.28000	ug/L

## Source Reagents

Resgent	Description	Туро	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volum Units
HFPO I.B_00008	Internal Standard for HFPO 0.5us/ml		12/12/18	***************************************	•••••••••••••••••••••••••••••••••••••••	***************************************	20.0000	uL
	HFPO LCS Calbradon Spike 0.5 kg/ml		10/30/18				0.80000	ul,

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02/08/2018 14:43





HFPO\_CAL-2\_00033

Description:

No. of Bottles:

Storage Location Reagent Volume;

Open Date:

Container(s): Comment:

level2

LCMS 1.000 mL Greation Date: --- 02/08/2018 ----

4986307

level-2

Expiration Date: Laboratory:

Prepared By:

Solvent: Solvent Lat 02/22/2018

TeelAmerica Denver Meyer, Andrew GC 80:20 Methenol: H2O

00016

# Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Finai Conc.	Final Conc. Units
ISCS (FFPC) ()A	HFPO I.B_00008	1 <b>2/1</b> 2/201 <b>8</b>	<b>0</b> .500000	<b>w</b> /mL	10.00000	ug/L
19C8 HFPO-DA (IB)	HFPO !.8_00008	12/12/2018	0.80000	ug/mL	10.00000	₩ø/L
Perillux o(2-proposypropanolo) acid	HFPO Bolko_00004	10/80/2018	0.50000	ug/mL	0.80000	w/L

### Source Reagents

Respont	Description	Туре	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volum Units
HFPO I.B_00008	Internet Standard for HFPO 0.8us/mt		12/12/18			······································	20,00000	u.
HFPO Spike_00004	HFPO LCS Calibration Spike 0.5ug/ml		1030/16				1.00000	uL.

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02/08/2018 14:44

Pege 1 of 1





HFPO\_GAL-3\_00032

Description No. of Bottles:

Storage Location: Respent Volume: Creation Date: ----

Open Date: Container(s): Comment

level3 LCMS

1.000 mL 02/08/2018

4958309 level-3

Expiration Date: Laboratory: Prepared By:

Solvent: Solvent Lot: 02/22/2018

Teel/Imerica Denver Meyer, Andrew GC 80:20 Metherol: H2O

00016

## Respent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Unite	Final Conc.	Final Conc. Units
1303 H <b>FPO-DA</b>	HFFO 1.6_00008	12/12/2018	0.80000	ug/ml.	10.00000	VØL.
18C3 HFPO-DA (18)	HFPO 1.8_00008	12/12/2018	0.50000	whiL	10.00000	ug/L
Perfluoro(2-proponypropanolo) adid	HFPO 6pl/m_00004	10/30/2018	0.50000	wint	1.00000	w/L

#### Source Reagents

Resgent .	Description	Туре	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot#	Volume Used	Volum Units
HFPO I.B_00008	Internal Standard for HFPO 0.8uphril	***************************************	12/12/18			***************************************	20.00000	uL.
HFPO Spike_00004	HFPO LCOCulturation States 0.5 m/ml		10/30/18				2.00000	uL

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02/08/2018 14:45





HFPO\_CAL-4\_00032

Description: No. of Bottlea: Storage Location: Reagent Volume:

Creation Date:---

leve4 4 **LCM8** 1.000 mL

--02/08/2018 - --

Open Date: Container(e): Comment

4958319 level-4

Expiration Date:

Laboratory: Prepared By: Solvent Solveut Tat: 02/22/2018

TeelAmerica Denver Meyer, Andrew GC 80:20 Methanol: H2O

00016

## Respent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Cons.	Bource Conc. Units	Cono	Final Cone. Unite
13C3 HFPC-DA	<b>HF</b> 70 LS_0008	12/12/2018	0.80000	vg/m.	10.00000	ug/L
13C3 HFPO-DA (19)	HFPO I.8_00008	12/12/2018	0.80000	ug/mL	10.00000	w
Partiuoro(2-propoxypropanoio) acid	HFPO 8plks_00004	10/30/2018	0.80000	w/mi.	2.00000	ug/L

## Source Reagents

Reagent	Description	Туре	Explation	Vendor	Vendor Lot#	Vendor Cat Lot #	Volume Used	Volum Units
	Internal Blandard for HFPO 0.5ug/ml		12/12/18	***************************************		***************************************	20,00000	w.
HFPO Syling_00004	HFPO LCS/Calibration Spike 0.5ug/mi		10/30/18				4.00000	u.

04/16/19

02/08/2018 14:47





HFPO\_GAL-5\_00080

Description

No. of Bottles: Storage Location:

Reagent Volume:

Creation Date: --- 02/08/2018 --- ---Open Date:

Container(s): Comment:

level6 4 LCMS

4956337

level-5

1.000 mL

Expiration Date: Laboratory: Prepared By:

Solvent: Solvent Lot 02/22/2018

TeelAmerica Denver Møyer, Andrew GC 80:20 Methenol: H2O

00018

# Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conq. Units	Final Conc.	Final Conc. Units
18C3 FEPG-DA	HFPO I.8_00008	12/12/2018	0.80000	ug/mL	10.00000	WL
13C3 HFPO-DA (IS)	HFFO 1.8_00008	12/12/2018	0.80000	ug/mL	10.00000	w/L
Perfluoro(2-propoxypropensio) edid	HFFO 8;80e_0004	10/30/2018	0.80000	ug/mL	8.00000	ug/L

#### Source Reagents

Resgont	Description	Typs	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volum Units
HFPO  .8_00008	Internal Standard for		12/12/18	***************************************	***************************************	***************************************	20.00000	WL.
	HFPO 0.8ug/ml							****
HF70 8p8ss_00004	HFPO LCS/Cellbrellon Spike O.Suphni		10/30/18				10.00000	uL

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02/08/2018 14:48





HFPO\_GAL-6\_00080

**Description**:

No. of Bottles:

Creation Date-Open Date:

Storage Location: Reagent Volume:

Container(s): Comment

level6

4958338

level-6

1.000 mL 02/08/2018 -

LCM8

Expiration Date:

Laboratory: Prepared By: Solvent: Solvent Lot

02/22/2018

Teel/America Denver Meyer, Andrew GC 80:20 Metherol: H2O

00018

# Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Pinai Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO I.8_00008	<b>12/1</b> 2/2018	0.80000	w/mL	10.00000	WL
13C3 HFPO-DA (8)	HFPO I.S_00008	12/12/2018	0.80000	ug/mL	10.00000	w/L
Perfluoro(2-propoxypropanoic) acid	HFPO 8p8re_00004	10/30/2018	0.80000	ug/mL	10.00000	ug/L

#### Source Reagents

Respont	Description	Туро	Expiration	Vendor	Vendor Lat#	Vendor Cat Lot #	Volume Used	Volum Units
HFPO I.8_30008	Internal Standard for HFPO 0.8up/ml		12/12/18				20.0000	u.
HFPO Spile_00004	HFPO LCSCalbration Solve G.Susimi		10/30/18				20.00000	uL.

Rudge od/w/\a

02/08/2018 14:49





HFPO\_CAL-7\_00032

Description: No. of Bottles:

No. of Bottlea: Storage Location: Reagent Volume: Creation Date:

Open Date: Container(e): Comment: level7 1 LCMS

1.000 mL 02/08/2018

4956339

level-7

Expiration Date: Laboratory:

Prepared By: Solvent: Solvent Lot: 02/22/2018

TeslAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

00018

# Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
18C3 HFPO-DA	HPO LS_0008	12/12/2018	- <b>8000</b>	ug/mi.	10.00000	W/L
19C3 HFPO-DA (IB)	HFPO I.S_00008	12/12/2018	0.80000	ug/mi.	10.00000	w/L
Perflucio(2-propoxyproperoid) acid	HFPO Bpile_00004	10/30/2018	0.80000	w/ml.	25.00000	ua/L

#### Source Reagents

Regent	Description	Тура	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot#	Volume Used	Volum Units
	Internal Standard for HFPO 0.8us/ml		12/12/16	***************************************	***************************************	***************************************	20.00000	uĹ.
HFPO 8pito_0004	HFPO LCS/Calibration Spiles 0.5ug/ml		10/30/18				50.00000	ul.

Roise edide

02/08/2018 14:50





HFPO\_CAL-8\_00032

Description: No. of Bottles: Storage Location:

leve|8 1 LCMS 1.000 mL

Reagent Volume: 02/08/2018

Open Date: Container(e): Comment:

Creedon Date:

4956340 level-8

Expiration Date: Laboratory: Propared By:

Solvent: \_\_\_Solvent Lot: 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol: H2O

00016\_\_\_

# Respent Analyte Information

Analyte	Source ID	Scurce Exp. Date	Source Cons.	Source Conc. Units	Pinal Cons.	Final Conc. Units
7373 HPPO DA	<b>H</b> FFO <b>1.8.</b> _20008	12/12/2018	0,50000	tými.	10,00000	w/L
13C3 HFPO-DA (16)	HFPO I.S00008	12/12/2018	0.80000	ug/mi.	10.00000	ug/L
Parliuoro(2-proposypropandio) adid	HFPO 8pile_00004	10/30/2018	0.80000	18/mL	80.00000	w/L

# Source Reagents

Respont	Description	Турю	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume · Unite
	Internal Standard for HFPO 0.8ug/ml		12/12/18	***************************************		***************************************	20.0000	u.
HFPO Spilos_00004	HFPO LCS/Calibration		10/30/18				100.00000	uL

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81/6/4

02/08/2018 14:62





HFPO\_CAL-0\_00001

Descriptions No. of Bottles:

No. of Bottles: Storage Location: ReadBnt Volume:

reagent volum Creation Date: Open Date:

Open Date: Container(e): Comment: level0 1 LCMS 1.000 mL 02/08/2018

4956342 level-0 Expiration Date:

Laboratory: Prepared By: Solvent: Solvent Lot: 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol: H2O

000018

# Reagent Analyte Information

Analyle	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
18C3 HF TO DA	HFPO <b>I</b> .S000 <b>08</b>	12/12/2018	0.50000	ug/mil	10.00000	ug/L
19C3 HFPO-QA (IS)	HFPO I.S00008	12/12/2018	0.60000	ug/mL	10.00000	wi.
Periluoro(2-proposypropenolo) add	HFFO 8plks_00004	10/30/2018	0.80000	ug/mL	100.00000	wL

### Source Reagents

<b>Reage</b> rs	Description	Турро	Expiration	Vendor	Vendor Loi #	Vendor Cat Lot #	Volume Used	Volumi Unite	
HFPO I.S00008	Internal Standard for HFPO 0.840/ml		121218	***************************************			20.00000	uL.	
HFPO Spike_00004			10/80/18				200.00000	uL.	

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02/08/2018 14:64





HFPO\_ICV\_00034

Description: No. of Bottles:

Storage Location: Respent Volume: Creation Date:

Open Date:

Container(s): Comment:

ICV 1 LCMS 1.000 ml 02/08/2018

4950341 ICV

Expiration Date: Laboratory: Prepared By: Solvent: Solvent Lot:

02/22/2018 TeelAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O 00016

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Cons.	Source Conc. Unite	Final . Cono.	Final Conc. Units
18C8 HFPO-DA	HFPO I.S00008	<b>1</b> 2/12/20 <b>18</b>	0.50000	ug/mL	10.00000	W/L
18C3 HFPO-DA (18)	HFPO I.S_00008	12/12/2018	0.80000	ug/mL	10.00000	UÇ/L
Parituoro(2-propoxypropencio) add	HFPO ICV_00001	11/03/2018	0.19800	ug/mL	1,90000	w/L

# Source Reagents

Respont	Description	Тура	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volum Unite
HFPO I.8_00008	Internal Standard for HEPO 0.8up/ml		12/12/18	~~~~~		***********************************	20.00000	uL
HFPO ICV_00001	ICV HFPO parany		11/03/18				10.00000	ul.

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02/08/2018 14:53

Pege 1 of 1





HFPO\_CAL-0\_00032

Description:

No. of Bottles: Storage Location: Reagent Volume:

Greation Deter Open Deter Container(e): Comment Blank 4

LCM8 1.000 mL 02/08/2018

4956304 ICB Expiration Date: Laboratory:

Prepared By: Solvent Solvent Lot: 02/22/2018

TestAmerica Denver Meyer, Andrew GC PFC\_DIIL\_Solvent

00018

# Reagent Analyte Information

4nalyb 1863 (#POOX	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Pinai Conç.	Pinel Conc. Unite
13C3 HFFC-DA		12/12/2018	0.50000	W/mL	10,00000	W.
13C3 HFPO-DA (18)	HFPO (8_00008	12/12/2018	0.80000	ug/mL	10.00000	un/L

# Source Reagents

Respons	Description	Туре	Expiration	Vendor	Vendor Lot#	Vendor Cat Lot #	Volume Used	Volum: Units
HFPO I.8_00008	Internal Standard for HFPO 0.04g/ml	***************************************	12/12/18			······	20.00000	**************************************

02/08/2018 14:41

Page 1 of 1

Thanesin P. Ozlulu





HFPO\_CAL-1\_00032

Description:

No. of Bottles: Storage Location:

Reagent Volume: Creation Date:--

Open Date: Container(s): Comment

level1 LCM8

4966306

level-1

1.000 mL · 02/08/2018 · ·-- ·· Expiration Date: Laboratory: Prepared By:

Solvent Solvent Lot: 02/22/2018

ToolAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

00018

# Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Cons. Units	Final Conc.	Final Cons. Units
1303 H <b>F</b> FO-DA	HFPO I.B_00708	12/12/2018	0.50000	uymi.	10.00000	SQL.
18C3 HFPO-DA (I8)	HFPO I.S_00008	12/12/2018	0.50000	ug/mL	10.00000	w/L
Peräuoro(2-proposypropanoic) acid	HFPO 8plks_00004	10/30/2018	0.80000	ug/mL	0.28000	₩/L

# Source Reagents

'Reagant	Description	Type	Expiration	Vendor	Vendor Lot#	Vendor Cat Lot #	Volume Used	Volum: Units
HFPO I.B_00008	Internal Standard for HFPO C.B.Whil	***************************************	12/12/18		······	***************************************	20.00000	ul.
HFPO 8plke_00004	HEPO LCS Calibration Solice O.A. com		10/30/18				0.80000	uL

02/08/2018 14:43

Page 1 of 1

Thomas et al. 02/\9/8





HFPO\_CAL-2\_00033

Description: No of Rolling

No. of Bottles: Storage Location:

Storage Location Reagent Volume: Greation Pate: ----

Greation Date: 02/08/2018 Open Date: 4958307

Comment:

1 LCMS 1.000 mL

level2

4956307 level-2 Expiration Date:

Laboratory: Prepared By: Solvent:

Solvent Lat:

02/22/2018

TestAmerica Deriver Meyer, Andrew GC 80:20 Methanol: H2O

00016

# Reagent Analyte Information

Analyte	Source ID	Scures Exp. Date	Source Conc.	Source Conc. Units	Final Cons.	Final Cone. Units
<b>1908</b> (1990-194	HEPO LS DOODS	12/12/2018	0.80000	uçm <b>L</b>	10,000	ug/L
13C3 HFPC-DA (IS)	HFPO 1.8_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-proposypropenolo) acid	HFPO 8ptcg_00004	10/30/2018	0.50000	w/mL	0.80000	ug/L

# Source Reagents

Respont	Description	Тура	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volum Units
HFPO 1.6_00008	Internal Glandard for HFPO 0.8up/ml		12/12/18	***************************************			20.00000	u.
HFPO Spike_00004	HFPO LCS/Calibration Solva 0.5up/ml		10/30/18				1.00000	ul.

02/08/2018 14:44

Page 1 of 1

Thaneastor P. Ozlialia





HFPO\_CAL-3\_00032

Description: No. of Bottles:

No. of Bottles: Storage Location: Descent Vol.......

Reagent Volume: Creation Date: ---

Open Date: Container(s): Comment: level3

LCMS 1.000 mL 02/08/2018

4956309 level-3 Expiration Date:

Laboratory: Prepared By: Solvent: Solvent Lot: 02/22/2018 TestAmeric

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

00016

# Reagent Analyte Information

Analyte	8ource ID	Source Exp. Date	Source Conc.	Source Cons. Units	Final Conc.	Final Conc. Units
<b>13</b> C3 HFPO-DA	HFPO I.8_00008	12/12/2018	0.80000	ugmL	10/00/00	ug/L
13C3 HFPO-DA (IS)	HFPO I.S00008	12/12/2018	0.60000	ug/mL	10.00000	ug/L
Parfiuoro(2-propogypropanolo) add	HFPO Splice_00004	10/30/2018	0.80000	ugánL	1.00000	<b>₩</b> L

# Source Reagents

Resgent	Description	Туре	Expiration	Vendor	Vendor Lot#	Vendor Cet Lot #	Volume Used	Volum Unite
	Internal Standard for		121218	***************************************		***************************************	20.00000	uL.
HFPO Spike_00004	HFPO 0.5ug/mi HFPO LCB/Cellbrellon Selke 0.5ug/mi		10/30/18				2.00000	uL.

02/08/2018 14:45

Page 1 of 1

Thaweash f. Wisha





HFPO\_CAL-4\_00032

Description: No. of Bottles:

Storage Location:

Respent Volume: Creation Date:----

Open Date: Container(s): Comment:

level4 4 LCMS

1.000 mL -- 02/08/2018 - --

4058319

level-4

Expiration Date:

Laboratory: Prepared By: Solvent Solvent Lot 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

00016

# Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Unite	Cone	Final Conc. Unite
TO PODA	MFPO LS_00008	12/12/2018	0.50000	uými.	10,00000	ug/L,
13C3 HFPO-DA (IB)	HFPO 1.8_00008	12/12/2018	0.80000	ug/mL	10.00000	w/L
Perfluoro(2-propoxypropenolo) acki	HFPO Spike_00004	10/20/2018	0.80000	ug/mL	2.00000	ugA

#### Source Reagents

Resgent	Description	Туре	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Veed	Volum Units
and a second contraction of the second of th	Internal Standard for HFPO 0.5us/ml		12/12/18	***************************************		***************************************	20.00000	W.
HFPO 8pike_00004	HFPO LCS/Callbration Spike 0.5ug/ml		10/30/18				4.00000	uL.

02/08/2018 14:47

Page 1 of 1

Thateech ? 92/13/18





HFPO\_CAL-5\_00080

Description

No. of Bottles:

Storage Location: LCMS
Reagent Volume: 1.000 mL

Creation Date: --- - 02/08/2018 --- ---Open Date:

Container(s): Comment:

level5 4

4958337 level-5

Expiration Date:

Laboratory: Prepared By:

Solvent: Solvent Lot: 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

00016

# Reagent Analyte Information

Analyta	Source ID	Source Exp. Date	Source Conc.	Source Cono. Units	Pinel Conc.	Pinal Conc. Units
18C8 HFPO-DA	HFPO I.8_000008	12/12/2018	<b>0.</b> 50000	W/mL	10.00000	w/L
13C3 HFPO-DA (IS)	HFPO 1.8_00008	12/12/2018	0.80000	ug/mL	10.00000	ug/L
Periluaro(2-propoxypropenolo) acid	HFFC 8plke_00004	10/30/2018	0.80000	ug/mL	8.00000	ug/L

### Source Reagents

Respect	Description	Typs	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volum Unita
HFPO I.B_00008	Internal Standard for HFPO 0.8xx/mi		12/12/18				20.00000	uL.
HFPO 8pline_00004			10/30/18				10.00000	uL.

02/08/2018 14:48

Page 1 of 1

Thorisan P 02/18/18





HFPO\_CAL-6\_00080

Description: No. of Bottles:

No. of Bottles: Storage Location: Reagant Volume:

Creation Date:Open Date:

Open vale: Container(e): Comment: leveiß 1

1.000 mL 02/08/2018

4958338

level-6

1 LCMS 1 000 ml Expiration Date: Laboratory; Prepared By:

Solvent: Solvent Lot: 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol: H2O

00016

### Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Cons.	Source Conc. Units	Pinei Cons.	Final Conc. Units
13C3 HFPO-DA	HFPO I.8_00008	12/12/2018	0.80000	<b>w</b> mL	10,00000	30%
13C3 HFPO-DA (18)	HFPO I.8_00000	12/12/2018	0.50000	ugėni.	10.00000	w.
Parlikoro(2-propoxypropenoic) ecid	HFPO 8plks_00004	10/30/2018	0.50000	ug/mL	10.00000	ug/L

# Source Reagents

Respont	Description	Type	Expiration	Vendor	Vendor Lot#	Vendor Cet Lot #	Volume Used	Volume Unite	
HFPO I.8_00008	internel Standard for HFPO 0.8us/m/		12/12/18			***************************************	20.00000	ű.	
HFPO Spike_00004	HFPO LC8/Celibration Solve 0.5up/ml		10/30/18				20.00000	uL.	

02/08/2018 14:49

Page 1 of 1

Thaneesh ?. Ozlialia





HFPO\_CAL-7\_00032

Description: No. of Bottles:

No. of Bottles: Storage Location; Reagent Volume: Creation Date:

Open Date: Container(e): Comment: level7 1 LCMS 1.000 mL

02/08/2018

4958339 level-7 Expiration Date: Laboratory:

Laboratory: Prepared By: Solvent: Solvent Lot: 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol: H2O

00018

# Reagent Analyte Information

Analyte 1903 HEPO-DA	Source (D	Source Exp. Date	Source Core.	Source Conc. Units	Finai Conc.	Final Cond. Units
1803 MPO-UA	HFPC (S_00008	12/12/2018	0.80000	ug/ml.	10.00000	ug/L
18C3 HFPO-DA (IS)	HFPO I.8_00008	12/12/2018	0.50000	ug/mL	10.00000	w/L
Perfluoro(2-proposypropenoic) add	HFPO 8plke_00004	10/30/2018	0.50000	ug/ml.	28.00000	ug/L

#### Source Reagents

Respont	Description	Type	Expiration	Vendor	Vendor Lot 8	Vendor Cat Lot#	Volume Used	Volum Units
HFPO I.8_00008	internal Standard for HFPO 0.5up/ml		12/12/18	***************************************		***************************************	20.00000	u.
HFPO 8piles_00004	HFPO LCS/Calloration Spike 0.6ug/mil		10/30/16				60.00000	uL.

02/08/2018 14:80

Page 1 of 1

Thansesh f. Ozhelo





HFPO\_CAL-8\_00032

\* Description: No. of Bottles:

No. of Bottles: Storage Location: Reagent Volume:

1 LCM8 1,000 ~ 02/08/

Open Date: Container(e): Comment:

Creedon Date:

1.000 mL 02/08/Z018 <sup>--</sup> 4958340

level-8

leve|8

**Expiration Date:** Laboratory:

Prepared By: Solvent: Solvent Lot: 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

00018

# Reagent Analyte Information

Analyte	Source ID	Source Bop. Date	Source Conc.	Source Conc. Units	Pinal Conc.	Final Conc. Units
SS HPPO-DA	<b>H</b> FFO <b>I.</b> S0000 <b>8</b>	12/12/2018	0.8000	ug/mi.	10.00000	W/L
13C3 HFPO-DA (18)	HFPO I.S00008	12/12/2018	0.50000	ug/mi.	10.00000	w/L
Perfluoro(2-proposyproperolo) add	HFPO 8plke_00004	10/30/2018	0.80000	ug/mL	80.00000	ug/L

#### Source Reagents

Respons	Description	Турю	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volumi · Unite
HFPO I.S_00008	Internal Standard for HFPO 0.6up/ml		12/12/18	***************************************		······································	20,0000	u.
HFPO Spile_00004	HFPO LCSCallbration Solice 0.8up/ml	•	10/30/18				100.00000	uL.

02/08/2018 14:52

Page 1 of 1

Thomassh f.





HFPO\_GAL-0\_0001

Description No. of Bottles:

Storage Location Reagent Volume:

Creation Date: Open Date:

Container(s): Comment

level0 LCM8 1:000 mL 02/08/2018

4966342 level-9

Expiration Date: Leboratory: Prepared By:

Solvent: Solvient Lot: 02/22/2018

TeelAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

000018

# Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Unite	Final Conc.	Final Cons. Units
18C3 HFFO-DA	HPO .5_000 <b>08</b>	<b>12/1</b> 2/2018	0.60000	ug/mL	10.0000	w.
13C3 HFPO-OA (IS)	HFPO I.8_00008	12/12/2018	0.50000	ugimL	10.00000	ug/L
Perfluoro(2-propoxypropanoic) add	HFPO Spike_00004	10/30/2018	0.50000	ug/mL	100.0000	w

### Source Reagents

Roagent	Description	Турю	Expiration	Vendor	Vendor Lot#	Vendor Cat Lot #	Volume Used	Volum Units
HFPO I.800008	Internal Standard for HFPO 0.8up/ml		12/12/18				20.00000	ui.
HFPO Spike_00004	HFPO LCS/Calibration Spike 0.6ug/ml		10/30/18				200.00000	uL.

02/08/2018 14:54

Page 1 of 1

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HFPO\_ICV\_00034

Description: No. of Bottles:

Storege Location: Reagent Volume: Creation Date:

Open Date:

Container(e): Comment

ICV 4 LCMS 1.000 inL 02/08/2018

4960341 ICV

Expiration Date: Laboratory: Prepared By:

Solvent: Solvent Lot: 02/22/2018

TestAmerica Denver Meyer, Andrew GC 80:20 Methanol : H2O

00016

### Respont Analyse Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Core.	Final Conc. Units
18C3 HFPO-DA	H∈F○1.6_00008	12/12/2018	0.80000	ug/mL	10.00000	W/L
19C3 HFPC-DA (18)	HFPO I.S00008	12/12/2018	0.80000	ug/mL	10.00000	w.
Perikusro(2-proposypropensis) add	HFPO ICV_00001	11/03/2018	0.19500	ug/mL	1.95009	ug/L

# Source Reagents

Reagent	Description	Тура	Expiration	Vendor	Vendor Lot #	Vendor Cat Let #	Volume Used	Volum Unite
HFPO I.B_00008	Internal Standard for HEPO Clauded		12/12/18	······································		***************************************	20.00000	uL.
HFPO ICV_00001	ICV HFPO pareny		11/03/18				10.00000	ыL

02/08/2018 14:53

Page 1 of 1

Thaveesh ? 92/kg/ra

# Shipping and Receiving Documents

**TestAmerica** 

Chain of Custody Record

(100) (200) (200) (200) (200)	O primary and	Annual management of the second of the secon	Absociation	THE LEADER IN ENVIRONMENTAL TESTING
Client Information	とも この	Lab PM; Johnston, Michelle	Carrier Tracking No(s);	COC No:
Client Contact Mr. Michael Aucoin	Phone: 74-600-6746	E-Mail: Michelle iohnston@hestamericaine com	Fedax	Page:
Company. The Chemours Company FC, LLC		Analunia Danina		Ö
Adress: Ic/o AECOM 4051 Ogletown Road, Suite 300	Due Date Requested:		no comba	Preservation Codes:
City: Newark	TAT Requested (days): 10 Business Davs			
State, Zp: DE, 19713				stats Void
Phone: 302.781.5873	Po#. LBIO-67048/84201000-2231QS1000	11.		F-MeOH R-Na2S2SO3 G-Amchlor S-H2SQ4
Етаіт. michael.aucoin@aecom.com	WO#	(4). (5).(O)		Acid
Project Name: FAY-2018 Residential Sampling	Project #. 28016904	'  (*) <sub>=</sub> }	112ting-	K-EDTA W-ph.4-5' L-EDA Z-other (specify)
stre. Chemons	\$SOW#:	FACE L	Pressir,	Other:
	Sample Type	Matrix (Wewness, Control of Contr		
Sample Identification Sample Date	Time G=grab)		PROTE	Special Instructions/Note:
= EA-D-6377TA80R-W-1-021218	5847	XXX		
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4-1	002 01 19 0932 G	LV INNX		Volume Pos
	CEP CAUSE CATI	NN X	0 0	3
FAN-0-(47-1480R-W-1-02018-NS	MS COUNT	WNX W		
FAI-D-[444] NGOK-W-1-0301 K	03018 0986 (5)	XVNX		
14N-0-66H41 NBCR-CU3-40901 R	6987 (3	X NW X		
PAY CONTRACTOR - 1-696118 63618	S 450		98Z	
FALL COST NOW CONTROL OF THE COST OF THE C	5) 20	J.		
FALL CASTABOR COLLEGE TO	0,00,18 1484 05 00,00,18 1484 05	2 2		
		Sample Disposal (A fee may be	assessed if samples are retaine	ed longer than 1 month)
sted: I, II, III, IV, Other (specify) Level IV	sorra Orimiawii Kadiologicai	Return To Client Dis   Special Instructions/QC Requirements:	oosal By Lab	Archive For Months
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:	
Retinquished by:	Date/Trne:	Company Recollectors.	- T	
Relinquished by:	Date/Time: Cor   18 / 1300   R	Company Recoived by Action Second Sec	02 (6) 19 Data/fine:	Maco Arsons Company Contract
Cristingly Scale: Principal Discindix Scale Mix.			Date/Time:	Company
A Yes A No		Cooler Temperature(s) Conditioner Remarks.	OI DR#5 Frans	was but and
		1	0.4 to.1 IR#S transferrally 018 2d	(z/i s

**TestAmerica Denver** 4955 Yarrow Street Arveds, CO 80002 Phone (303) 736-0100 Fax (303) 431-7171

**TestAmerica** 

Chain of Custody Record

	Sampler	11 35 DA		20000000000000000000000000000000000000	
Client Information	No character and	Johnston, Michelfe		Camer Iracking No(s):	COC No:
Cilent Consoci Mr. Michael Aucoin	37-020-12A		E-Mait: michelle johnston@testamericainc.com	Febrex	Page Of C
Company: The Chemours Company FC, LLC			- G - j - j - w		
Address:	Due Date Requested:		Analysis Aeduested	Desce	Presentation Codes.
GO ALCCIM 4001 Ogletown Road, Suite 300	T. A. M. J. B				A . HO
Newark	(At Requested (days): 10 Business Days		_		, ¥,
State, Zp: DE, 19713	•				C - Zn Azerare C - Asnatoz D - Nistic Acid P - Na2O4S E - NaHSO4 C - Na2SO3
Phone: 302.781.5873	Po#: LBIO-67048/84201000-2231QS1000				
ooin@aecom.com	<u> 100 bronzensensenskianski</u>				H - Ascorbic Acid 1 - Ice 1 - Di Water
Sling	Project #: 28016904	(p.e).el			K-EDTA L-EDA
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Sample Identification Sample Date	Sample Date Time G=grab)	O=waschold, ES ET=Tesua, A=Ab) (ES			Special Instructions/Note:
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Deliverable requested: I, II, III, IV, Other (specify) Level IV		Special	Special Instructions/QC Requirements:	Riverno Geographic Managery (Managery (Manager	W. W. Company of the
Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
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4955 Yarrow Street Arvada, CO 80002 Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

**TestAmerica** 

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figure Contact ffr. Michael Aucoin	Phone: A. L. C. Phone	// E	E-Mail:			Page:		CONTRACTOR OF THE PROPERTY OF
ompany	/ C. 200-10/	# <b>4</b>	iichelle, johnston@testameric	ainc.com		Page	Je / of /	
he Chemours Company FC, LLC			•	Analysis Reginested	ind soil	# dol	#	
ddress: fo AECOM 4051 Ogletown Road, Suite 300	Due Date Requested:	#0000000000000000000000000000000000000				Pre	Preservation Codes:	99-99-99-99-99-99-99-99-99-99-99-99-99-
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none: 02.781.5873	PO# PO# PO # 00000000000000000000000000000000000	\$ 500 F.C.				111		R-Na2S2SO3
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Company

Date/Time;

Custody Seal No.:

Custody Seals Intact:

elinquished by:

TestAmerica

Chain of Custody Record

**TestAmerica Denver** 4955 Yarrow Street Arvada, CO 80002 Phone (303) 736-0100 Fax (303) 431-7171

Client Information	Saggibler:	Color M. C. Lab PM:		Carrier Tracking No(s):	COC No.
Client Contact	LIM MODE	MVCPS Shriston			
Mr. Michael Aucoin	704-600-57	440 michelle	E-Mait: michelle.johnston@testamericainc.com		Page: Dane of
Company: The Chemours Company FC, LLC			And stantant	D	***************************************
Address: c/o AECOM 4051 Oaletown Boad Stuite 300	Due Date Requested:		AN elegiblic		Preservation Codes:
Other Newark	TAT Requested (days):				A - HCt. M - Hoxane B - NaOH N - None
State, Zip: DE, 19713	ro pusiness Days	v.			cid cid
Phone: 302_781.5873	Po# LBIO-67048/84201000-2231QS1000				F- MeOH R- Na2S2SO3 G- Amchior S- H2SO4
Enait: michael.aucoin@aecom.com	W0#:	-	(61)		H - Ascorbic Acid I - Ice I - IN Water
Project Name: FAY-2018 Residential Sampling	Project#: 28016904				K-EDTA W-ph 4-5 L-EDA Z-other (specify)
Site:	SSOW#:	(1013)		Trop) (	Other:
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Deliverable Requested: 1, 11, 11, 1V, Other (specify) Level IV			Special Instructions/QC Requirements:		
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**TestAmerica** 

Chain of Custody Record

**TestAmerica Denver** 

Arvada, CO 80002 4955 Yarrow Street

THE LEADER IN ENVIRONMENTAL TESTING

0 . Asnatoz P - Na2048 Q - Na2803 R . Na282803 S - H2804 T - TSP Dodecahydrate Volumes Special Instructions/Note: W - ph 4-5 Z - other (specify) しょせんのかん Company U - Acetone V - MCAA Months Retains Company Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mont Preservation Codes: G - Amchlor H - Ascorbic Acid ά, D - Nitric Acid E - NaHSO4 F - MeOH I - Ice J - Di Water K - EDTA Z T San A-HCL B-NaOH 5 COC No: Page: Page 10.4 -U. 5845 transcred by DS 2/2/10 Cooler Temperature is 1 C and Other Remarks: **ST** Date/Time: Date/Time: Method of Shipment 医原则 Carrier Tracking No(s): Analysis Requested Special Instructions/QC Requirements: michelle.johnston@testamericainc.com Return To Client Received by: 1200 Lab PM: Johnston, Michelle XXXXX マ よ ス ス SSX XXX × 2 XXX <u>×</u> AG-099H - 8M/8M/D. MNX XXXX (विशेषककर्षेत्र) हाईस्रीयक्षिकाकोछन me: Parsons FAME {Wæwater, S=solid, O=wasteloli, Matrix 3  $\mathbf{Z}$ 3 3 Ž 3 Company Sampler BRinke, T. Poritt Radiological 24-5-009-40L (C=comp, G=grab) Sample Ü -0 #: -BIO-67048/84201000-2231QS1000 Type TAT Requested (days): 10 Business Days b ৬ b ৬ 9 Date: 11/15/17 1731 0251 PI 1960 000 81/19/CO 02/01/18 0943 02/01/18 0755 1630 62/01/18 1435 Sample 02/01/18 0900 FAY-D-3322DANDE-WI-I-02018 REP 02/01/18 1630 74-D-3322DANDE-WI-I-000115 D 02/01/12 1630 03/01/18 1710 FAY-D-3332 DANDE-WI-1-020118 MS 02/01/18 1630 Time Poison B Unknown Date/Time: Q2/ot/18 Date/Tirfe: Due Date Requested: 02/01/18 Sample Date Project#; 28017573 SSOW#: Date/Time: ¥0¥ FAY-D-47MAUDI-WI-2-020 118 FAY-D-1123NC20H-WI-1-020118 FAY-D-47MAUDI-WI-1-020118 -4Y-D-3333 DANDE-W-I-030118 FAY-D-40595PNSH-WI-2-DAMIS FAY-D-5085 MRSHR-WI-1-020118 eliverable Requested: J, II, III, IV, Other (specify) Level IV Non-Hazard Flammable Skin Imtent のみかの FAY-D-FB-020118-4 c/o AECOM 4051 Ogletown Road, Suite 300 Custody Seal No.: Tainter Phone (303) 736-0100 Fax (303) 431-7171 FAY-D- FB- 020118 FAY-Stormwater Sampling 11/17 The Chemours Company FC, LLC ossible Hazard Identification michael.aucoin@aecom.com Empty Kit Relinquished by: Custody Seals Intact: Client Information Sample Identification elinquished by: 8 Dient Contact: Vir. Michael Aucoin 302.781.5873 efinquished by: elinquished by: State, Zip: DE, 19713 City: Newark

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A. Yes: A. No. | Arvada " CO 80002 Phone (303)735-0100 Pex (303) 431-7171 Possible Hazard Wediffication [--] Non-Hazard [--] Flammsble The Chemours Company FC, LLC FAY-2018 Residential Sampling TestAmerica Denver michael aucoin@aecom.com Emply Kit Relinquished by Client Information sample Identification 4955 Yarrow Streot Mr. Michael Aucein 302,781,5873 natificitied By: ngdlished by: State, 200. DE, 19713 Page 708 of 711 4-3

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TestAmerica Denver 4955 Yarrow Streat  Arxada CC 80002  Phone (303) 736:0100 Fax (303) 431-7474		Day Date Requested (CELO-6704B)24WO#	Sample Identification  Sample Date   Time  The Control of the Cont		8 8 8	Empky Kli Relinquished by  Reinquished by  Rei
<u>77</u>	Client Information Client Information Proceed to the Microsoft Congany Congany Congany Congany Congany Congany Congany	Addiress Cor AECOM 4051 Ogletovm Road, Suite Sup Cor AECOM 4051 Ogletovm Road, Suite Sup Newark State, Zip DE 1/97/13 U2.731 (587-3) Inner	Sample Identification Sample Date  Sample Date  The Control of the	504944774-10-2018	FAY-D- 444ITA BSI (-W-I-020/118   02. の18   FAY-D- 456- 0. 2018 - 8   02. 01 (8   Possible Hazard Identification	mply Kii Felinquished by:    Colston   Colston
calDenver reat: D02 6:0100:Fax (303)431-1	ClientInformation Cert Contact Mr. Michael Aucoln Congany The Chemours Company FCr. LC	Address  co AECOM 4051 Ogietowni Roed, Suite 300  Novarik. Sae. Zep. DE 19713  OE 19713  OE 19713  Michael alucoh@aecom.com  michael alucoh@aecom.com  Froet Nama.  Froet Nama	VITTARYS VITTARYS	CLICK MATTER  CLICK MATTER  SOMMATTHEN  THE COLUMBER  THE	FAY-D- 7741 TABOR-W-1-02 FAY-D-FB-6:20118-B Possbie Hazard Identification  Non-Hazard Elemmable  Odiversite Respected: 1.11.111 W. Other; spacify)	Emply Kil Relinquished by: Relinquished by: Relinquished by: Custody/Saak Macci. Custody/Saalil Luirkes N No
TestAmeri 4855 Yarrow, St. Arvada CO 80 Phone (303) 738	Client Inform Centconage Mr Michael Auc Company The Chenjours	Address Co AECOM 4051 Ogietow Obeverk See: Zpp: DE /19713 Phore: Phore: The first of the first o	Sample Identif	EAN-0-1 (SA): (SA): (SA): (SA): (SA): (SA):	FAYLD- FAYLD- Possible Hazal	Emply Kill Pelin Retrolubed by Retrolubed by Retrolubed by Custody/Seat

# **Login Sample Receipt Checklist**

Client: Chemours Company FC, LLC The

Login Number: 106036 List Source: TestAmerica Denver

List Number: 1

Creator: True, Joshua A

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Job Number: 280-106036-1